

Health System Surge and Resource Management Tabletop Exercise November 3, 2006

After Action Report



Health System Surge and Resource Management Public Health – Seattle & King County



Health System Surge and Resource Management Public Health – Seattle & King County Table of Contents

Executive Summary	4
I. Exercise Overview	5-6
II. Exercise Objectives	6
III. Exercise Events Synopsis	6
IV. Analysis of Mission Outcomes	7-12
V. Conclusions	12-13

Appendices

Appendix A: Evaluation Tools

Appendix B: Summary of Results

Appendix C: Participant Lists

Design Team Members

Players

Observers

Evaluators

Staff

Appendix D: Exercise Slides

Health System Surge and Resource Management Public Health – Seattle & King County

Executive Summary

On November 3, 2006 Public Health – Seattle & King County (Public Health) hosted the Health System Surge and Resource Management Tabletop Exercise at the Seattle Center in Seattle, Washington. The discussion-based exercise tested communication and coordination of regional resource management and allocation in the healthcare system. The exercise was the last in a series of exercises hosted by Public Health which included: Communicable Disease and Surveillance Tabletop, Public Information Call Center Functional, and Leadership and Decision-Making Tabletop.

Players of the exercise represented regional hospitals, ambulatory care providers including community clinics, fire departments, emergency medical services, Department of Health and Human Services, Washington State Department of Health, the Regional Medical Resource Center and various Public Health staff. Observers included regional hospitals, fire departments, Puget Sound Blood Center, Pacific Northwest National Laboratory, Washington Poison Center, Washington State Medical Association and Public Health staff. A number of the exercise participants are members of the King County Healthcare Coalition, which is a network of healthcare organizations and providers in King County collaborating to coordinate and strengthen a regional healthcare response to all hazards.

Exercise evaluation design was coordinated by Northwest Center for Public Health Practice. Pre- and post- evaluations of the exercise provided feedback from both Players and Observers regarding the usefulness of the exercise and identification of areas for improvement. Post-survey data indicated that most Players and Observers agreed that the exercise was: useful and relevant to their jobs and roles in an emergency; helped them integrate and practice skills and knowledge from prior trainings; increased their understanding of the healthcare community response to pandemic influenza; and increased their networking capability.

Overall, it was noted by participants that the most valuable components of the exercise were: discussion of plans that are in place; identification of gaps, limitations, and concerns; networking and interactions with other stakeholders re: pandemic influenza. Increasing training, exercises and communication among regional health systems were noted as areas in need of improvement. Surge capacity planning is in the early stages, and it was acknowledged by participants that the exercise outcomes will help facilitate planning efforts.

Health System Surge and Resource Management

Public Health – Seattle & King County

I. Exercise Overview

Exercise Name:	Health System Surge and Resource Management
Duration:	4 Hours
Exercise Date:	November 3, 2006
Sponsor:	Public Health – Seattle & King County
Type of Exercise:	Tabletop
Funding Source:	Department of Homeland Security
Focus:	Mitigation and Response
Classification:	Unclassified
Scenario:	Pandemic Influenza
Location:	Seattle Center Lopez and Fildalgo Rooms 305 Harrison Street Seattle, Washington
Participating Organizations:	Children’s Hospital and Medical Center Community Health Centers of King County Department of Health and Human Services Evergreen Hospital Group Health Cooperative Harborview Medical Center International Community Health Services Pacific Northwest National Laboratory Public Health – Seattle & King County Puget Sound Blood Center Regional Medical Resource Center Seattle Fire Department St. Francis Hospital

Health System Surge and Resource Management Public Health – Seattle & King County

Participating Organizations: Swedish Hospital and Medical Center
University of Washington Medical Center
Virginia Mason Medical Center
Washington Poison Center
Washington State Department of Health
Washington State Medical Association

Number of Participants: 27 Players
27 Observers
3 Evaluators
2 Notetakers
1 Facilitator

Exercise Evaluation: Appendix A: Evaluation Tools
Appendix B: Summary of Results

II. Exercise Objectives

1. Determine the region's ability to manage staffing challenges
2. Evaluate the system for tracking and coordinating available medical resources (staffing and supplies)
3. Assess the region's ability to address the potential security challenges associated with a surge in patients.
4. Identify existing and alternative patient transport resources for patients identified as needing hospitalization
5. Test the healthcare community's ability to operationalize surge capacity strategies, such as alternate care facilities, altered staffing models and altered standards of care.

III. Exercise Events Synopsis

Players were presented with 3 Situation Updates, each simulating a week's progression of a pandemic that provided players with general international, national and local information. After each Situation Update, Players were presented with a message specific to their situation locally to drive the exercise objectives, and then questions were asked to instigate the Players response related to that specific message (Appendix C: Scenario and Messaging PowerPoint).

Health System Surge and Resource Management

Public Health – Seattle & King County

IV. Analysis of Mission Outcomes

Questions to Players:

- How is your organization managing the increased demand for services?
- Are you treating influenza-like-illness patients differently?
- How are you managing the public?
- What steps have you taken to address employee concerns about personal protection, and have you communicated your plans to employees and their unions?
- How would your organization address employee demands for antiviral use for prophylaxis?
- Who will determine the amount of antivirals your organization receives and how they are used?
- How will your organizations ensure that antivirals are used appropriately?
- How would organizations address a potential shortage of supplies?
- Has any planning taken place with supply distributors?
- Do healthcare facilities have Mutual Aid Agreements (MOU's) with suppliers?
- How do suppliers plan to honor any MOU's?
- Do vendors have business continuity plans in place?
- What other planning has been done to equitably allocate scarce resources across the region?
- Are there current healthcare medical surge plans to accommodate the growing number of patients - inpatient, emergency rooms, outpatient?
- Would you be willing to share supplies or staff with another facility that has higher patient demand?
- How are outpatient clinics managing the large volume of patients?
- Has Public Health or the King County Healthcare Coalition taken any actions to add resources, such as opening alternate facilities, deploying Public Health Medical Reserve Corps, etc?
- What planning for security is taking place at healthcare facilities?
- What is law enforcement's role in securing hospitals and other healthcare sites in a pandemic?
- Do organizations have existing contracts with security companies?
- Do facilities know if their contracted security companies have business continuity plans in place?

Health System Surge and Resource Management

Public Health – Seattle & King County

Questions to Players: (continued)

- How will you set priorities for patient admissions in your hospital?
- What will you do with patients who need to be hospitalized, but cannot be accommodated?
- How will you use alternate facilities or other strategies to accommodate the excess demand?
- What other arrangements do you have with community-based organizations to respond to patient needs?
- How will you coordinate transport of patients needing to be transferred to other sites?
- What steps would you take to keep staff at work?
- Have hospitals/clinics created alternate staffing models to accommodate staffing shortages?
- Has your organization established a staff sharing model across clinic sites?
- Have you discussed plans with employees and/or their unions, if alternate staffing models are necessary?
- Do you have your own pool of volunteers to supplement your paid staff?

Outcomes Based on Objectives:

1. Determine the region's ability to manage staffing challenges

- Seattle Fire Department will change staffing models and change dispatch procedures and triage.
- Medic One has 911 triage scripts and recorded lines for different types of scenarios. They will address personal protective equipment for staff to decrease transmission.
- Hospitals will encourage phone triage to keep people out of hospital. They will focus on external (telephone) triage: information dissemination out to providers with help from Centers for Disease Control and Public Health – Seattle & King County regarding messaging content
- Hospitals anticipate providing frequent staff education and situation updates.
- Emergency management partners will coordinate through virtual emergency operations centers for staff.
- Hospitals plan to implement facility access changes for staff and patients and pre-designate facilities for service types.

Health System Surge and Resource Management Public Health – Seattle & King County

1. Determine the region's ability to manage staffing challenges (continued)

- Hospitals anticipate that they will implement mandatory patient isolation within the hospitals early in the pandemic, but not after sustained human to human transmission of pandemic. (Note: voluntary isolation will be recommended throughout the pandemic period.)
- Public Health needs consistent and coordinated messages, and needs to improve their ability to communicate to more providers throughout the healthcare system. This is a big challenge.
- Public Health advises continual and increased staff education so that staff members feel supported by their organizations.
- Hospitals have an employee education program and hotline. Some are currently utilizing the educational presentation developed by Public Health Communicable Disease/Epidemiology Program.
- Medic One plans to serve as resource for antiviral distribution to Public Safety Employees.
- According to Washington State Department of Health, the Strategic National Stockpile (SNS) will have 7 days to distribute cache to states, then states will distribute to locals, and locals will distribute to system for direct distribution to hospitals. The SNS will include antivirals and personal protective equipment.
- Public Health's Emergency Medical Services is beginning to engage labor unions now to increase understanding the needs of staff during an event, and to negotiate change of job tasks during pandemic.
- Hospitals report currently talking to staff regarding human resources policies during a pandemic.
- Community clinics currently report being understaffed. During an event they would need additional outside support from health system partners or a change in the current standard of care.

2. Evaluate the system for tracking and coordinating available medical resources - staffing and supplies

- Public Health, in collaboration with healthcare system and first responder partners, is developing an antiviral distribution plan using Center's for Disease Control and Prevention guidelines, as well as meeting region specific needs.
- King County stockpile and other private stockpiles and caches need to be coordinated.
- Hospital staff members need to feel protected and supported to come to work during an event.

Health System Surge and Resource Management Public Health – Seattle & King County

2. *Evaluate the system for tracking and coordinating available medical resources -staffing and supplies (continued)*

- Public Health recommends hospitals and health systems plan for decrease in staff numbers, secondary to fear or actual illness, because there are not enough antivirals to use as prophylaxis.
- Hospitals need clarity on use of, and appropriate types of personal protective equipment for hospital staff.
- Hospitals anticipate the redistribution of supplies to strategic or heavily impacted sites
- The Regional Medical Resource Center (RMRC) will work in collaboration with the Public Health EOC in supporting the coordination and sharing of resources across the health system.
- There are some private hospital caches to ensure maximizing of local resources in the event that SNS and County resources are limited.
- The Regional Medical Resource Center is currently evaluating supply chain limitations for western Washington, as well as vendor agreements.
- The Regional Medical Resource Center is interested in obtaining more specific information regarding amount and type of SNS resources which would be available to the region.
- All hospitals have emergency credentialing programs as required by JCAHO.

3. *Assess the region's ability to address the potential security challenges associated with a surge in patients.*

- Hospitals will look to the National Guard to assist with security, but the Guard will also have shortages and be spread thin.
- Hospitals are strengthening relationships with local law enforcement.
- It is recommended that hospitals develop MOU's with security companies; security companies should develop business continuity plans.

4. *Identify existing and alternative patient transport resources for patients identified as needing hospitalization*

- Fire departments and Public Health's Emergency Medical Services are anticipating the necessity of monitoring hospital system status to determine if changes in response protocols need to be made.
- Fire departments and Emergency Medical Services anticipate triaging and coordinating with hospitals to determine whether to transport to a hospital, alternate care facility, or recommend home care.

Health System Surge and Resource Management Public Health – Seattle & King County

5. *Test the health care community's ability to operationalize surge capacity strategies, such as alternate care facilities, altered staffing models and altered standards of care*
 - Hospitals are interested in maintaining their ability to provide ongoing care for complex patients, to have symptom free clinics and curbside screening, and to create limiting facility access to limit spread of illness to non-flu patients.
 - Ambulatory care, particularly community clinics, anticipate being overwhelmed with existing chronically ill patients who will still require care.
 - Public Health plans to consolidate their clinics and resources, but model has yet to be developed. They anticipate a high volume of non-English speaking patients, and patients coming to clinics without appointments.
 - Vulnerable populations (specifically homeless people) pose a particular challenge in discharge planning, since they have no designated location for, for 'home care'.
 - It is unclear who will staff alternate care facilities, if there is already a staff shortage in the health system.
 - The Healthcare Coalition is currently developing plans and procedures for the development and implementation of alternate care facilities, which will impact urgent care and discharge protocols.
 - Hospitals will look to Public Health and the Healthcare Coalition to develop recommendations for altered standards of care, and for these guidelines to be uniform regionally.
 - The Healthcare Coalition Critical Care Workgroup is developing ethical guidance on altered standards of care for hospitals. It is recommended that hospitals have plans developed to first surge internally and then to shift to altered standards of care, as the demands on the system exceed capacity.
 - It is important to develop altered standards of care protocols before the decision is needed or forced.
 - After hospitals cancel elective surgeries, hospitals plan to use the extra space made available to facilitate segregation of patients with pandemic flu.
 - Hospitals anticipate educational and operational challenges when implementing altered standards of care.
 - Public Health orders are needed to ensure that priority setting occurs uniformly across the region regarding altered standards of care.

Health System Surge and Resource Management Public Health – Seattle & King County

5. *Test the health care community's ability to operationalize surge capacity strategies, such as alternate care facilities, altered staffing models and altered standards of care (continued)*
- Washington State Department of Health recommends family/caregivers accompany their loved ones to alternate care facilities to provide support.
 - Involve the community now in the discussions re: health system care during a medical disaster, so there are no surprises at the time.
 - Alternate Care Facilities, rather than hospitals might be the best place to integrate volunteers.
 - Public Health is currently developing a public health reserve corps. They are considering expanding it to a broader medical reserve corps to support alternate care facilities and regional call center coordination.

V. Conclusions

Lessons Learned:

Successes

- Public Health is currently sponsoring “listening sessions” re: non-English-speaking populations, along with training of interpreters.
- Public Health is currently addressing the issues of supplies, vulnerable populations, staff training and awareness, and consistency in communication issues.

Areas for Improvement

- Participants are encouraged by progress, but are still talking within our comfort zone. The planning needs to include thinking about worst case and mass fatality scenarios.
- It was recommended that the mass media become engaged now for public education and engagement.
- Hospitals recommend that supply chain discussions include follow through to the challenges of waste disposal.
- Finance reimbursement and recovery remain questions.
- Department of Health and Human Services stated that a Stafford Act issue will require congressional action.
- Community clinics recommend more effort be put toward working with multi-language communities, using the patients' community organizations as resources.

Health System Surge and Resource Management

Public Health – Seattle & King County

Areas for Improvement (continued)

- Hospitals recommend that other business sectors need to be included in planning; for example; food supply, utilities, multinational corporations, and volunteers.
- Community education is needed to inform the public about current planning; engage block watch organizations for education and training support.
- Public Health needs more connection with community-based organizations.
- Transparency of planning is necessary for healthcare staff and the public to increase awareness paradigm shift from “business as usual” that will be required in a pandemic. Policy and decision makers need to be able to be honest and straight-forward with the public.

**Public Health Seattle & King County
Pandemic Flu Exercise Events—2006**

**PRE-EXERCISE EVALUATION
Health System Surge Capacity and Resource Management Tabletop Exercise
November 3, 2006**

Thank you for completing the following survey. This evaluation is designed to collect your feedback about the emergency response exercise and how it contributes to your understanding of the emergency preparedness plan.

Confidentiality Statement

Your responses are confidential and will be analyzed collectively with other participant responses. Aggregate data are used to provide the exercise designers with feedback regarding the quality of the exercise and the benefit to the participants. NWCPHP does not disclose individually identifiable responses. Your responses will not be linked to or reflected in your employee personnel file.

Directions

Please mark only one answer for each question unless otherwise requested.

1. What type of organization or agency do you work for?

- ☐ Educational Institution
- ☐ Community-based or nonprofit organization
- ☐ Federal health agency
- ☐ Health department—local/county
- ☐ Health department—state
- ☐ Health services—tribal
- ☐ Hospital, medical center, clinic, or other health delivery center
- ☐ Police, fire, or EMS
- ☐ Private industry or business
- ☐ Other, please specify: _____

2. What will your role be **during the exercise**?

- ☐ Player
- ☐ Observer

APPENDIX A - Exercise Evaluations

The following questions relate to current knowledge and practices regarding the specific objectives of this exercise. (Please check the box that best represents your level of confidence in regard to each statement.)

3. In the event of a pandemic flu outbreak, I am confident:

Statement	0 = Not confident at all				5 = Neutral				10 = Completely Confident			
	0	1	2	3	4	5	6	7	8	9	10	
a. I understand my role and responsibilities.												
b. My organization will be able to respond effectively.												
c. The health care community overall will be able to respond effectively.												
d. I will be able to carry out my role and responsibilities.												

4. I am confident health care facilities will have effective procedures in place for:

Statement	0 = Not confident at all				5 = Neutral				10 = Completely Confident			
	0	1	2	3	4	5	6	7	8	9	10	
a. Managing staffing challenges.												
b. Tracking available medical resources (staffing and supplies).												
c. Assessing anticipated needs for pharmaceutical and other consumable and durable resources.												
d. Identifying existing and alternative patient transport resources for patients identified as needing hospitalization.												
e. Operationalizing potential surge capacity strategies such as alternate facilities, canceling elective surgeries, implementing altered standard of care models.												
f. Determine the healthcare system's ability to manage large numbers of fatalities.												

Thank you for completing the survey



**Public Health Seattle & King County
Pandemic Flu Exercise Events—2006**

**POST-EXERCISE EVALUATION
Health System Surge Capacity and Resource Management Tabletop Exercise
November 3, 2006**

Thank you for completing the following survey. This evaluation is designed to collect your feedback about the emergency response exercise and how it contributes to your understanding of the emergency preparedness plan.

Confidentiality Statement

Your responses are confidential and will be analyzed collectively with other participant responses. Aggregate data are used to provide the exercise designers with feedback regarding the quality of the exercise and the benefit to the participants. NWCPHP does not disclose individually identifiable responses. Your responses will not be linked to or reflected in your employee personnel file.

Directions

Please mark only one answer for each question unless otherwise requested.

1. What type of organization or agency do you work for?

- ☐ Educational Institution
- ☐ Community-based or nonprofit organization
- ☐ Federal health agency
- ☐ Health department—local/county
- ☐ Health department—state
- ☐ Health services—tribal
- ☐ Hospital, medical center, clinic, or other health delivery center
- ☐ Police, fire, or EMS
- ☐ Private industry or business
- ☐ Other, please specify: _____

2. What will your role be **during the exercise**?

- ☐ Player
- ☐ Observer

APPENDIX A - Exercise Evaluations

The following questions relate to current knowledge and practices regarding the specific objectives of this exercise. (Please check the box that best represents your level of confidence in regard to each statement.)

3. In the event of a pandemic flu outbreak, I am confident:

Statement	0 = Not confident at all					5 = Neutral					10 = Completely Confident				
	0	1	2	3	4	5	6	7	8	9	10				
a. I understand my role and responsibilities.															
b. My organization will be able to respond effectively.															
c. The health care community overall will be able to respond effectively.															
d. I will be able to carry out my role and responsibilities.															

4. I am confident health care facilities will have effective procedures in place for:

Statement	0 = Not confident at all					5 = Neutral					10 = Completely Confident				
	0	1	2	3	4	5	6	7	8	9	10				
a. Managing staffing challenges.															
b. Tracking available medical resources (staffing and supplies).															
c. Assessing anticipated needs for pharmaceutical and other consumable and durable resources.															
d. Identifying existing and alternative patient transport resources for patients identified as needing hospitalization.															
e. Operationalizing potential surge capacity strategies such as alternate facilities, canceling elective surgeries, implementing altered standard of care models.															
f. Determine the healthcare system's ability to manage large numbers of fatalities.															

APPENDIX A - Exercise Evaluations

The following questions relate to the exercise overall. *(Please check the box that best represents your level of agreement with the statement.)*

	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
5. The exercise was well organized.					
6. The expectations and instructions were clearly presented before the exercise.					
7. The scenario was realistic and credible.					
8. The exercise included all critical elements of mass care resource allocation.					
9. The exercise met the stated objectives.					
10. The exercise was relevant to my job and my role in an emergency.					
11. The exercise helped me to integrate and practice skills and knowledge I learned in prior trainings.					
12. Participating in the exercise increased my understanding of the health care community response to pandemic flu.					
13. Participating in the exercise increased my networking capability.					

14. The length of the exercise was:

- ☐ Too short
☐ About right
☐ Too long

15. Please rate the exercise in terms of its **overall usefulness** to you and your agency.

- ☐ Excellent
☐ Very Good
☐ Good
☐ Fair
☐ Poor

16. What was the **most valuable part** of the exercise?

APPENDIX A - Exercise Evaluations

17. How could the exercise have been improved?

18. Is there additional information or training related to mass care resource allocation that you feel you still need? If so, please explain.

Thank you for your comments and for participating in the exercise

APPENDIX A - Exercise Evaluations

Public Health Seattle & King County Pandemic Flu Exercise Events—2006

POST-EXERCISE EVALUATION Observer Role

Thank you for completing the following survey. This evaluation is designed to collect your feedback about the emergency response exercise and how it contributes to your understanding of the emergency preparedness plan.

Confidentiality Statement

Your responses are confidential and will be analyzed collectively with other observer responses. Aggregate data are used to provide the exercise designers with feedback regarding the quality of the exercise and the benefit to the participants. NWCPHP does not disclose individually identifiable responses. Your responses will not be linked to or reflected in your employee personnel file.

Directions

Please mark only one answer for each question unless otherwise requested.

1. Which Pandemic Flu Exercise did you observe? (*Mark only one*)

- ☐ Public Information Call Center
- ☐ Leadership/Decision Making
- ☐ Health System Surge Capacity and Resource Management
- ☐ Communicable Disease Surveillance

The following questions relate to the subject of the exercise you observed.

2. Based upon the player statements relevant to the response function you observed:

a. What are the strengths of the response?

b. What are the gaps of the response?

c. What suggestions do you have for response improvement?

APPENDIX A - Exercise Evaluations

The following questions relate to the exercise overall. *(Please check the box that best represents your level of agreement with the statement.)*

	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
3. The exercise was well organized.					
4. The exercise was well facilitated.					
5. The expectations and instructions were clearly presented before the exercise.					
6. The scenario was realistic and credible.					
7. The exercise included all critical elements of mass care resource allocation.					
8. The exercise met the stated objectives.					

9. The length of the exercise was:

- ☐ Too short
☐ About right
☐ Too long

10. What was the **most valuable part** of the exercise?

11. How could the exercise have been improved?

Thank you for your comments and for observing the exercise

APPENDIX B

Evaluation of the Public Health – Seattle & King County Pandemic Flu Exercises

Summary of Results

December 26, 2006

Luann D'Ambrosio, Assistant Director
Northwest Center for Public Health Practice
University of Washington
Seattle, Washington

Sandra Senter, MN, MPH, Evaluation Consultant
Group Health Community Foundation
Seattle, Washington

Maggie Jones, Research Assistant
Northwest Center for Public Health Practice
University of Washington
Seattle, Washington

Sarah Paige, Research Assistant
Northwest Center for Public Health Practice
University of Washington
Seattle, Washington

APPENDIX B - Summary of Results

EVALUATION OF THE PUBLIC HEALTH—SEATTLE & KING COUNTY PANDEMIC FLU EXERCISES

SUMMARY OF SURVEY RESULTS

OVERVIEW

Public Health – Seattle & King County implemented four functional and tabletop exercises in October and November 2006. The goals of the exercises were to strengthen collaborations, identify gaps, and make adjustment to plans to respond to a pandemic influenza event in King County. The exercises included:

- Communicable Disease Surveillance Tabletop Exercise
- Public Information Call Center Functional Exercise
- Leadership and Decision Making Tabletop Exercise
- Health System Surge Capacity and Resource Management Tabletop Exercise

Across the four exercises, there were a total of 86 players, 87 observers and content experts, and 15 evaluators (These are not all unique people, several people participated in more than one exercise). Players participated in the actual tabletop exercise and the debrief; observers watched the exercise and offered their insights during the debrief; content experts had a similar role to the observers except that the players were able to ask for their input during the exercise; the evaluators assessed whether the exercise met its stated objectives.

Exercise planners requested that the player's complete a pre-exercise survey to collect demographic data and baseline data regarding self-reported knowledge/skills. The players also completed a post-exercise questionnaire designed to gather reactions to the exercise as well as participants' perceptions of their knowledge/skills upon completing the exercise. The observers and content experts were asked to complete a post-exercise survey regarding the strengths and weaknesses of the response and overall reactions to the exercise. Evaluators filled out checklists to assess and comment on how well the exercises met their stated goals. The following summarizes findings from the players' pre-and post-exercise surveys, the observers' post-exercise survey, and comments from the evaluators' checklists. Complete survey comments are included in **Attachments A-C**.

METHODOLOGY

The players' pre-exercise survey was administered on-site before each exercise. The players' and observers' post-exercise surveys were administered on-site after the completion of each exercise. The evaluators' checklist was completed by evaluators throughout each of the exercises. All of the evaluation instruments were paper copies. **Table 1** shows the number of participants that received and completed the questionnaires for each exercise.

APPENDIX B - Summary of Results

Table 1:
Survey Samples

Survey	# Distributed	# Completed	Response Rate
Communicable Disease Surveillance			
Player Pre-Exercise	16	16	100%
Player Post-Exercise	16	11	69%
Observer Post-Exercise	28	20	71%
Evaluator Checklist		4	
Public Information Call Center (PICC)			
Player Pre-Exercise	33	22	67%
Player Post-Exercise	33	26	79%
Observer Post-Exercise	2	1	50%
Evaluator Checklist		2	
Leadership/Decision Making			
Player Pre-Exercise	18	17	94%
Player Post-Exercise	18	14	78%
Observer Post-Exercise	31	20	65%
Evaluator Checklist		6	
Health System Surge Capacity and Resource Management			
Player Pre-Exercise	20	16	80%
Player Post-Exercise	20	18	90%
Observer Post-Exercise	26	19	73%
Evaluator Checklist		3	

DEMOGRAPHIC DATA

The pre-exercise survey gathered information about players' type of employer or job position/primary role. Nearly half (45%) of players in the Communicable Disease, PICC, and Health System Surge Capacity exercises were from health departments (**Table 2a**). Sixty percent of players in the Leadership/Decision-Making exercise represented emergency managers and school personnel (Table 2b). No demographic data were collected from observers or evaluators.

Table 2a: Player Pre-Exercise (for Communicable Disease, PICC, and Health System Surge Capacity); Current Employer (% of respondents) n=53

Employer	% of Respondents
Educational Institution	
Community-based or non-profit organization	4
Federal health agency	2
Health department—local/county	43
Health department—state	2
Health services—tribal	
Hospital, medical center, clinic, or other health delivery center	26
Police, fire, or EMS	23
Private industry or business	
Other, please specify	

APPENDIX B - Summary of Results

Table 2b: Player Pre-Exercise (for Leadership/Decision Making)
Current Job Position or Primary Role (% of respondents) n=17

Job Position/Primary Role	% of Respondents
Public Official	18
Emergency Manager	29
School Personnel	29
First Responder	6
Public Health Personnel	6
Other County Personnel (non-Public Health)	12
Business Representative	18
Other	29

USEFULNESS, SATISFACTION, AND BENEFIT TO PARTICIPANTS

The post-exercise survey asked players and observers about their overall satisfaction with the individual exercise attended and—for players—whether the exercise content will be applicable to their work. Respondents to the player and observer post-exercise questionnaires agreed that the exercise was well organized, well facilitated and met its stated goals. They also agreed that the scenarios were realistic and credible and that expectations and instructions were clear at the beginning of the exercise. The majority of players rated the exercise—in terms of overall usefulness—as either excellent or very good. Respondents to the player post-exercise questionnaire agreed that the exercise was relevant to their job and role in an emergency. They also agreed that the exercise increased their understanding of how the health care community would respond to pandemic flu and increased their networking capability. The majority of respondents agreed that the Communicable Disease Surveillance, PICC, and Health System Surge Capacity exercises included all critical elements of the relevant subject matter; however, only 29 percent of Leadership/Decision Making players felt that the exercise included all critical elements of leadership/decision making. (Table 3a -3d).

Table 3a: Player Post-Exercise
Overall Usefulness (aggregate data for all exercises, % of respondents)

	PLAYERS' RESPONSES				
	Excellent	Very Good	Good	Fair	Poor
Overall exercise in terms of its overall usefulness to you and your agency. n=67	36	46	15	3	

APPENDIX B - Summary of Results

**Table 3b: Player/Observer Post-Exercise
Overall Satisfaction** (aggregate data for all exercises, % of respondents)

	PLAYERS' RESPONSES					OBSERVERS' RESPONSES				
	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
Exercise was well organized. <i>Players: n=69</i> <i>Observers: n=59</i>	54	44		3		66	34			
Exercise was well facilitated. <i>Players: n=37</i> <i>Observers: n=58</i>	65	32		3		63	34	3		
Expectations and instructions were clearly presented before the exercise. <i>Players: n=70</i> <i>Observers: n=58</i>	51	40	4	4		55	41	3		
Scenario was realistic and credible. <i>Players: n=65</i> <i>Observers: n=57</i>	45	48	5	3		42	51	7		
Exercise met the stated objectives. <i>Players: n=67</i> <i>Observers: n=57</i>	34	58	2	3	3	37	60		2	2
	Too Short		About Right	Too Long		Too Short		About Right	Too Long	
Length of the exercise was: <i>Players: n=69</i> <i>Observers: n=57</i>	9		91			7		93		

APPENDIX B - Summary of Results

Table 3c: Player Post-Exercise

Benefit to Participants (aggregate data for all exercises, % of respondents)

	PLAYERS' RESPONSES				
	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
The exercise was relevant to my job and my role in an emergency. <i>n=68</i>	46	46		4	4
The exercise helped me to integrate and practice skills and knowledge I learned in prior trainings. <i>n=68</i>	29	53	2	3	13
Participating in the exercise increased my understanding of the health care community response to pandemic flu. <i>n=68</i>	46	47	2	4	2
Participating in the exercise increased my networking capability. <i>n=68</i>	37	47	2	3	12

Table 3d: Player/Observer Post-Exercise

Inclusion of Critical Elements for each Exercise (% of respondents)

The exercise included all critical elements of:	PLAYERS' RESPONSES					OBSERVERS' RESPONSES				
	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
Communicable disease surveillance. <i>Players: n=11</i> <i>Observers: n=18</i>	36	36	9	9	9	17	50	33		
Public Information Call Center operations. <i>Players: n=24</i> <i>Observers: N/A</i>	17	71	8		4					
Leadership/decision-making. <i>Players: n=15</i> <i>Observers: N/A</i>		29	47	12						
Mass care resource allocation. <i>Players: n=18</i> <i>Observers: n=19</i>	17	67	11	6		42	37	21		

Players and observers were asked the most valuable part of the exercise. Several themes emerged from both players' and observers' comments, including: discussion what plans are in place and how systems will work; identification of gaps, limitations, and concerns; networking and interactions with other stakeholders on pandemic flu; and the discussion during the debrief. Some example comments are:

APPENDIX B - Summary of Results

- Just having the exercise is probably one of the most valuable parts. I think this will be a good tool regardless of the situation. Training public health people on call center duties is a necessary resource to maintain. *(Player, Public Information Call Center)*
- All aspects of the exercise were valuable. Having a good diversity in participants and active participation from the Local Health Officer, the County Executive, and some of their key staff was helpful. *(Player, Leadership and Decision Making)*
- Trying to think through a response and coming to the conclusion that they [various medical treatment centers] must work together. *(Player, Health System Surge Capacity)*
- Hearing what plans are in place and hearing important questions raised that need to be considered. *(Observer, Communicable Disease Surveillance)*
- Meeting partners in the community and having an open, frank discussion. *(Observer, Communicable Disease Surveillance)*
- The debrief got at the issues that still need to be addressed. *(Observer, Leadership and Decision Making)*
- Helped me realize where some of the gaps are for our clinic and for the larger community. *(Observer, Health System Surge Capacity)*

Players and observers also were asked how the exercise could have been improved. Although many of the comments were specific to the individual exercise, a couple of themes appeared. Themes included: 1) Need for more drills, training, and/or continued dialogue on the issues identified during this series of exercises; and 2) involve a broader range of participants.

Complete comments for individual exercises—from players and observers—are included in **Attachments A and B**.

EVALUATOR'S ASSESSMENT

The official evaluators were asked to assess whether each exercise met its intended goals. Overall, evaluators indicated that the primary objectives were met. **Table 4** shows evaluators' responses to the question "Was the exercise objective met?" for each objective. Overall, the majority of evaluators indicated that the exercises met most of their stated objectives. Complete responses and comments are included in **Attachment C**.

Table 4: Evaluators' Checklists
Attainment of Exercise Objectives (# of respondents)

Objective	Evaluator Response (# of respondents)				
	Yes	No	N/A	Not Observed	N/R
Communicable Disease Surveillance Tabletop Exercise (n=4)					
1. Test and understand usefulness of influenza report forms in monitoring the needed epidemiologic/demographic characteristics of cases.	4				
2. Discuss reporting of persons hospitalized with pneumonia (medical floor and ICU admissions).	3				1
3. Test CD EPI channels of communication to disseminate case definition of influenza with health care community.	3			1	
4. Describe ability of health care facilities and public health	4				

APPENDIX B - Summary of Results

clinics to receive messages from CD Epi and disseminate to health care providers in their practice setting.					
5. Evaluate ability of healthcare facilities to follow infection control guidelines for management of suspected cases of influenza A H5N1.	4				
6. Assess ability of healthcare facilities to obtain and process specimens for diagnostic testing.	1	2			1
Public Information Call Center (PICC) Functional Exercise (n=2)					
1. Test PICC procedure manual—Operator guide, usability, clarity, job cards.	Q: "Was the exercise objective met?", was not asked for this objective.				
2. Test PICC operator's ability to manage large volume of calls.	1				1
3. Verify PICC operator's ability to deliver messages to the public.	2				
Leadership and Decision-Making Tabletop Exercise (n=6)					
1. Test the information and the criteria needed to implement social distancing measures	5	1			
2. Identify how a social distancing policy applied broadly in a pandemic will affect various sectors (government, private, non-profit, public).	5	1			
3. Assess readiness of emergency management partners to coordinate with the Local Health Officer (LHO) and PHSKC in a health emergency.	6				
4. Determine how elected officials and government agencies can best communicate their support of LHO decisions regarding the protection of public health (i.e. social distancing, shifts in health care system).	5	1			
5. Identify how decisions regarding social distancing will be best communicated to the public.	5				1
Health System Surge Capacity and Resource Management Tabletop Exercise (n=3)					
1. Determine the region's ability to manage staffing challenges.	3				
2. Evaluate the system for tracking and coordinating available medical resources (staffing and supplies).	2	1			
3. Assess region's ability to address the potential security challenges associated with a surge in patients.		2		1	
4. Identify existing and alternative patient transport resources for patients identified as needing hospitalization.	1	2			
5. Test the health care community's ability to operationalize surge capacity strategies, such as alternate care facilities, altered staffing models, and altered standards of care.	3				

KNOWLEDGE AND SKILLS

Players were asked to rate their level of confidence—on a scale from 0 to 10 with 0 being not confident at all and 10 being completely confident—about specific exercise objectives related to a pandemic flu outbreak on both the pre- and post-exercise surveys. Several changes in confidence level were found between the pre- and post-exercise questionnaires. Table 5 shows the complete results; significant changes are indicated by bold typeface. Level of significance is indicated by * for a significance level greater than 95% and ** for a significance level greater than 99%.

APPENDIX B - Summary of Results

**Table 5: Players Pre- and Post-Exercise
Self-rating of Knowledge and Skills (% of respondents)**

Question	Pre-Exercise		Post-Exercise		Significance
	Mean	S.D.	Mean	S.D	p-value
Communicable Disease Surveillance					
	pre- n=16		post- n=11		
I understand my role and responsibilities.	7.13	2.09	8.00	1.18	0.157
I understand how influenza report forms are used in monitoring needed epidemiologic/ demographic characteristic of cases.	5.19	3.35	7.73	1.35	0.004**
I understand the process of reporting persons hospitalized with pneumonia (medical floor and ICU admissions).	4.06	3.28	6.36	2.42	0.011*
I understand the PHSKC CD/EPI channels of communication and procedures to disseminate case definition of influenza to the health care community.	5.31	3.38	7.18	1.83	0.024*
I understand the process for health care facilities and Public Health clinics to receive messages from CD/EPI and disseminate messages to health care providers in their practice setting.	5.94	2.72	7.00	1.84	0.065
Health care facilities will be able to follow infection control guidelines for management of suspected cases of influenza A H5N1.	5.00	2.07	5.45	2.54	0.952
Health care facilities will be able to obtain and process specimens for diagnostic testing.	5.38	2.00	5.18	2.14	0.163
My organization will be able to respond effectively.	6.69	1.82	7.18	1.60	0.546
The health care community overall will be able to respond effectively.	5.19	2.14	5.64	2.11	0.030*
I will be able to carry out my role and responsibilities.	7.31	1.45	7.36	1.96	0.739
Public Information Call Center					
I understand the Public Information Call Center (PICC) procedure manual related to pandemic flu.	4.62	3.41 (n = 21)	5.96	3.14 (n=23)	0.021*
I will be able to access the resources I need in the PICC Operators Guide.	4.81	3.16 (n = 21)	5.86	2.64 (n=22)	0.027*
I understand my role and responsibilities in the PICC.	5.43	3.68 (n = 21)	7.38	2.78 (n=21)	0.020*
I will be able to manage a large volume of calls.	6.15	2.74 (n = 20)	7.38	2.33 (n=21)	0.018*
I will be able to accurately deliver pre-determined messages to the public.	6.70	2.85 (n = 20)	7.64	2.11 (n=22)	0.077
The PICC overall will be able to respond effectively.	6.55	1.67 (n = 20)	7.57	1.91 (n=21)	0.030*
Leadership & Decision Making					
I understand the decision-making process for each phase of the outbreak.	5.53	2.29 (n=17)	7.13	1.92 (n=15)	0.097

APPENDIX B - Summary of Results

Question	Pre-Exercise		Post-Exercise		Significance
	Mean	S.D.	Mean	S.D	p-value
I understand my role and responsibilities.	7.24	2.29 (n=17)	7.80	1.52 (n=15)	0.263
I understand the information needed and the criteria for implementing social distancing measures.	6.12	2.29 (n=17)	7.20	2.42 (n=15)	0.258
I understand how a social distancing policy applied broadly will affect various sectors (government, private, non-profit, public).	6.12	2.26 (n=17)	6.93	2.01 (n=15)	0.188
I understand how decisions regarding social distancing will be communicated to the public.	5.59	2.45 (n=17)	7.40	2.20 (n=15)	0.028*
Emergency management partners will coordinate effectively with the Local Health Officer (LHO) and Public Health-Seattle & King County in a health emergency.	6.71	2.78 (n=17)	7.67	2.09 (n=15)	0.179
My organization will be able to coordinate effectively with partners.	8.24	1.48 (n=17)	7.93	1.79 (n=15)	0.206
Health System Surge Capacity & Resource Management					
I understand my role and responsibilities.	7.43	2.34 (n=16)	7.83	1.46 (n=18)	0.597
My organization will be able to respond effectively.	6.81	1.68 (n=16)	6.44	1.62 (n=18)	0.296
The health care community overall will be able to respond effectively.	5.87	1.78 (n=16)	5.05	1.76 (n=18)	0.184
I will be able to carry out my role and responsibilities.	7.81	1.72 (n=16)	7.41	1.73 (n=17)	0.359
Managing staffing challenges.	4.47	1.81 (n=15)	4.11	1.88 (n=18)	0.681
Tracking available medical resources (staffing and supplies).	5.75	2.24 (n=16)	5.50	1.62 (n=18)	0.642
Assessing anticipated needs for pharmaceutical and other consumable and durable resources.	5.69	2.06 (n=16)	5.67	1.85 (n=18)	0.601
Identifying existing and alternative patient transport resources for patients identified as needing hospitalization.	5.06	2.02 (n=16)	3.78	2.24 (n=18)	0.011*
Operationalizing potential surge capacity strategies such as alternate facilities, canceling elective surgeries, implementing altered standard of care models.	5.50	2.71 (n=16)	4.39	1.91 (n=18)	0.084
Determine the healthcare system's ability to manage large numbers of fatalities.	4.81	2.01 (n=16)	3.72	2.19 (n=18)	0.065

STRENGTHS AND GAPS IN THE RESPONSE

Observers were asked to comment on the strengths and gaps in the response. Most comments were specific to the individual exercise, but some commonalities existed.

APPENDIX B - Summary of Results

Strengths included: commitment of stakeholders, advanced planning, coordination of response, existing relationships/partnerships between key players, and demonstrated understanding of the issue.

Gaps included: consistent messaging and distribution of information to the public, the media, and other stakeholders; legal issues around quarantine; capacity and human resource shortages; business continuity and return to operations; and lack of consideration of complexities, uncertainties, and chaos during an actual event.

Complete comments for individual exercises along with suggestions for how the response could be improved are included in **Attachment A**.

SUMMARY

Overall, comments regarding the Public Health—Seattle and King County Pandemic Flu Exercises were extremely positive. Over a two-month period, PHSKC held four exercises including Communicable Disease Surveillance Tabletop Exercise, Public Information Call Center (PICC) Functional Exercise, Leadership and Decision Making Tabletop Exercise, and Health System Surge Capacity and Resource Management Tabletop Exercise. Across the four exercises, a total of 86 players, 87 observers and content experts, and 15 evaluators participated.

An aggregate of post-survey data from all of the exercises indicated that almost all players and observers agreed that the exercises were well organized and well facilitated. Additionally, players and observers agreed that expectations and instructions were clearly presented and that the exercises met their stated objectives. Over 90 percent of players and observers stated that the exercises were about the right length.

Over 80 percent of players rated the overall exercise—in terms of usefulness—as very good or excellent. Players mostly agreed that the exercises: 1) were relevant to their job and role in an emergency (90%), 2) helped them to integrate and practice skills and knowledge from prior trainings (82%), 3) increased their understanding of the health care community response to pandemic flu (93%), and 4) increased their networking capability (84%).

The majority of players agreed that the Communicable Disease Surveillance, PICC, and Health System Surge Capacity exercises included all critical elements of the relevant subject matter; however, only 29 percent of Leadership/Decision Making players felt that the exercise included all critical elements of leadership/decision making.

Comments from players and observers indicated that the most valuable parts of the exercises included: discussion what plans are in place and how systems will work; identification of gaps, limitations, and concerns; networking and interactions with other stakeholders on pandemic flu; and the discussion during the debrief. Suggestions from players and observers included: 1) Need for more drills, training, and/or continued dialogue on the issues identified during this series of exercises, and 2) Involve a broader range of participants.

APPENDIX B - Summary of Results

Official evaluators for each exercise noted that the exercises met most of their objectives. More specifically, the majority of evaluators indicated that: the Communicable Disease Surveillance exercise met five out of its six objectives, the PICC exercise met 1 out of its 3 objectives¹, the Leadership and Decision Making exercise met all of its objectives, and the Health System Surge Capacity exercise met three out of its five objectives.

Overall, player self-reported knowledge and abilities for the majority of objectives improved across all of the exercises from the pre- to the post-exercise surveys. Several objectives showed statistically significant changes at the 95% or 99% level of confidence. These significant changes are identified in Table 5.

Questions on the observers' post-surveys about the actual response noted strengths with the advanced planning that has been done, collaborative relationship that already exist, and stakeholders' understanding of and commitment to the pandemic flu issue. However, observers noted that more work needs to be done around communication, legal issues, business continuity, and consideration of implementation of the response in the midst of the chaos and confusion that would occur during an actual emergency.

¹ The question "Was the exercise objective met?" was only asked for 2 of the 3 objectives for the PICC exercise.

OBSERVER Post-Exercise Evaluation: Responses to Open Ended Questions

1. What are the strengths of the response?

Communicable Disease Surveillance

- Strong core group
- Communication to the hospitals
- Public health and some local hospitals appear to be well along the way to planning and response; there appear to be collaborative relationships developing
- Good attitude of working together
- Public health preparation—systemic description already prepared and systems for disaster exist. Institutions are taking this seriously
- The core that were at the training
- Identified many elements already in place, in particular using current reporting mechanisms for case reporting. The communication methods used for SARS were great—we can't get too much information. Particularly valuable were Jeff Duchin's comments with each new alert on what is different from the previous alert.
- Identifying uncertainties in communications and requirements
- Knowing what PHSKC will be requesting during different stages; information regarding what other facilities are doing
- Many people who represent main hospitals and organization are here and have vested interest
- Advanced planning, getting lots of input
- Region 6 seems well connected—but I wonder how deep this goes in institutions
- Some modes of communication already in place; people obviously put thought into this
- The depth of talent brought to bear on the issues
- Broad range of experience
- Good identification of issues

Public Information Call Center (PICC)

- Realistic: constantly ringing phones, types of scenarios

Leadership/Decision Making

- Magnitude of planning done in so many sectors
- A coordinated response is being developed
- EOC plans across the board
- Relationships between organizations
- Ability to represent organizations
- There has been a lot of thought and coordination among agencies. Leaders seem to understand the importance of communication and messaging
- Demonstrated understanding and commitment of leadership
- Important to note that public non-technical officials are understanding response
- Leadership at top level
- Conceptual structure for decision-making
- Exercised EOC Structure
- I came away with a fairly good feeling that planning to date is as solid as it can be. This is a complex issue for which planning will never be complete
- People are aware of individual specialties understanding of issues
- Unified response and understanding
- Multiple organizations working closely together
- There are plans in place that need to be relied on

APPENDIX B - Summary of Results

- Well developed plans and integrated efforts. The partnerships and structures are in place to begin to plan for the response and recovery phases
- Level of knowledge was impressive—especially Ron Sims and Barb Graff
- Plans are in place
- Commitment to public health-oriented decision-making by leaders
- Commitment to lead in an emergency, not be passive or evade decisions
- Collegial interaction among participants
- Players at table seem fairly familiar with pandemic flu and emergency plans

Health System Surge Capacity and Resource Management

- Data; Phone triage; federal assistance; public health
- Most players at the table
- Responders have a good sense of capability and resources available to them. They came to the table to discuss the issues
- We are already talking
- Initial response plans fairly well developed
- Showed value in sharing of ideas and resources, possible flow scenarios, and brought out where gaps occur in planning—i.e. homeless care plan, pediatrics, elderly treatment plans, etc.
- Provided a great deal of clarification of issues; answered questions
- Regional hospitals are working together
- Collaboration
- We look to Public Health for guidance and “orders” to follow. Public safety has planned for dispatch functions, dealing with reduced staff (fire/EMT response)
- Considerable efforts into individual plans and the start of community coordination and planning
- There is a lot of amazing work going into preparedness
- Good representation by key players
- Good relationship evident between participants
- Individual medical center planning is excellent; looking forward to collaborating between medical centers and others
- Impressed with Seattle Fire Dept efforts to estimate food/fuel needs based on 1918. Also impressed with complex issues PH is addressing and leading the discussion nationally and a bit dismayed that only 10% response to Jeff’s request for information from regional MDs
- Recognition of how big of an issue this is
- Willing to work together
- Great, creative ideas
- A great deal of knowledge at the table; good ideas and work

2. What are the gaps of the response?

Communicable Disease Surveillance

- Communication of consistent messages to both public and healthcare workers
- Education of public—shelter at home, personal responsibility and accountability for preparedness
- Communication from public health department to health care providers in home health and others in the community not associated with hospitals
- Communication to the public, health care providers, and other health entities; planning for dealing with staffing shortages; planning for shortage of PPE & antivirals; weaving in other essential players—public transportation, home health, clergy...
- Communication
- The public is not prepared to be proactive with personal responsibility and as such will be over reactive with demands on PCPs and Hospitals at a time care cannot be provided
- Communication; disseminating changing information
- Surveillance during peak to monitor when over. Coordinating information gathering and dissemination. Need for command and control structure that works and is widely recognized

APPENDIX B - Summary of Results

- Too quick an overview at an early state
- Communication; education
- Vagueness relating to infrastructure for reporting
- Communication strategies in limited resource situations; establishment of “role boundaries” in presence of limited resources what will be done?
- Communication; identification of what information will be needed for decision making (will forms allow the ability to determine if hospitalization or triage to alternate facility make a difference?)
- Communications between PH and hospitals, healthcare facilities. Need more representatives from other facilities to be part of this team
- Healthcare staffing issues, antiviral supply, possible PPE supply
- Staff training for infection control—especially in non-clinical staff
- Getting accurate messages to providers and public; smaller outpatient facilities may give wrong message, which will lead to ED overwhelm of sick worried
- Unclear if players and represented agencies are functional with regard to incident command and NIMS (and NRP). Also unclear how communications are used for prudent notifications to all layers of community government and services
- Legal issues; communications—interagency and private
- How to make response in the very early stages more concrete
- Early in response, before introduction of illness into US; prompt notification to Qs of travelers with illness can assist with consistent issuing (Qs can obtain passenger customs declarations, etc)

Public Information Call Center (PICC)

- Not enough information provided to the operators
- Phones did not work well with the headsets

Leadership/Decision Making

- Considerations for chaos/inconsistencies in response
- Quarantine logistics and legal issues
- Much work to do with public education
- Detailed workings of specific programs are vague
- Vulnerable and low income populations
- Lack of ability to communicate with private area health care providers
- Lack of continuity between policies and communicable disease/ epidemiology practice
- In general, it seems that responses were geared to how well we are doing, instead of really dealing with the issues. It doesn't seem there are gaps
- Realistic view of what information will be available for decision making
- Understand public responses—will take more than just education; effect of organization on public
- Lack of awareness as to information gaps; lack of clarity as to situation and triggers for action
- Overall, too superficial—over simplified. We need to expect much more ambiguity and divergence of opinion
- County thinking that 5 cases is the trigger for social distancing
- Lack of infrastructure and financial support at middle and lower levels
- Unanticipated response and effects on individuals/businesses/families
- No mention of effects on infrastructure such as food, fuel, power, internet, etc.
- I don't have any more to add to what was white-boarded
- Understanding interactions needed at an EOC level
- Education of public and school plans
- Decision-making matrix
- Role of media
- There needs to be more dialogue on the issues identified during the debrief—there are a lot of uncertainties and details that still need to be worked out

APPENDIX B - Summary of Results

- Utilize the time when pandemic flu is a major (confirmed cases) problem elsewhere in the world and country but not yet in Seattle—this is the time to really prepare people for social distancing and other measures before they need to be implemented but when people are paying attention
- There was a lot of dynamic tension between following the plan (to the letter) and the reality that decisions should be made based on the available epidemiology data, Need to be clarity of all the Public Health must make these judgment calls/decisions
- No plan for ECC/EOC coordination at point of communicable illness introduction to a US port
- Lack of school leaders at the table, ditto police and fire leaders
- Unrealistic expectations about clarity of decision-making in the event—things will not be as clear as people think they will be
- Failure to acknowledge huge political pressures and information gaps that will exist
- Not enough key players for decision-making—what if these leaders are sick and could not be part of decision making?

Health System Surge Capacity and Resource Management

- How do we care for regular medical patients? Overwhelming!
- Distribution of info to public
- Participants were long on ideas and issues, but short on specifics and solutions let alone exercising plans
- No communications systems discussion; no police function represented
- Just in time
- Alternate care facilities, staff resources, systemic maximum capacity plans
- Specific look at vulnerable populations, esp. pediatrics and elderly groups
- Look at plan to tap volunteer resources
- Need to look more at “worst case”; how do we handle mass deaths?
- Public health direction re: orders for prioritization
- Well defined in discussion
- Human Resources: How will alternate care sites be staffed? Will employees agree to work in a different capacity or will they just stay home?
- Communication issues—especially with LEP patients and vulnerable populations (homeless)
- Interregional planning
- Assumptions around antivirals—how many doses, length, and repeat dosing for treatment are not clear. Private stockpile creates select hospitals in the public eye
- Community priorities need to go beyond pan-flu and be based on survivability
- Human resources availability probably underestimated
- Consistent standards of care in each facility during each phase
- Business, communications, mental health all absent from the table
- Doesn't go far enough—what about handling mass dead and civil disorder?
- Shouldn't assume this will be like 1918 again—it's dangerous to assume that we will be fighting the same kind of battle (military makes this mistake in every new war.)
- County to state to federal links for communication in planning stages is weak—players/public health needs more information about what states and feds are planning
- There was a gap of engagement from a few key communities, i.e. local law enforcement, medical examiners, funeral directors, ports, DOD. I suggest they be included in further discussions
- What are our resources and where do we use them?
- We share staff between hospitals, how does that affect our individual resources and what are we doing about it?
- Coordination between all; it seems like most have individual plans that do not coordinate with others
- Timelines to develop plans
- We need to develop plans for education and start teaching now

APPENDIX B - Summary of Results

3. What suggestions do you have for response improvement?

Communicable Disease Surveillance

- It's critical that there be a communication plan established for health care community at large. I doubt that they pandemic can be managed with the communication system that is currently in place
- Bring more people to the table; clarify the role of home health
- Think about using HAM radios for communication
- Public personal responsibility and preparedness now (not later)
- Clear and concise communications outline; clear and concise authority
- 1) Clear command and control structure; 2) Wider communication of command and control structure before hand (now); 3) Cohesive plan communicated to public (and care providers) regarding major aspects to anticipate; 4) commitment by providers to furnish important surveillance information to PH
- \$\$\$\$--politicians at the table
- It would be helpful to repeat this exercise after implementation of things identified here
- Develop and test a robust infrastructure for surveillance including redundancy
- More involvement with primary care docs, should have a couple of independent practitioners as players
- Improve communication via institutional channels; No lab response discussed for large scale response; find out what hospitals can easily report with existing systems particularly with large case numbers; Need to have screening criteria and lab communication communicated clearly
- Possible short-term emergency hiring of health care workers from other hospitals, "quickie" training of staff who could be utilized at CNA's
- More drills and tabletops
- Hospital admin will need to put their MDs on the public health email list serves—MDs are too busy to take time to do it; Boeing has their own health care clinics, maybe other big organizations do too. Work to get them on board. Use radio to get messages to public
- Research and plan for how to deal with the various interdependencies that are crucial components to operations, etc. Also should partner very closely with points of entry to prepare for travelers that are far from home and have no place to go for in-home quarantine
- Emphasize preparation now (individual-emergency kits; health care-respiratory protection for staff; PH-continue planning); share between facilities, between agencies, between counties
- Assess hospital ERs and staff for implementation of protocols on: for ILI patients—are they asking about recent international travel?

Public Information Call Center (PICC)

- Maybe give operators "red cards" to hold up if they need assistance from a supervisor or support staff rather than try to hunt them down

Leadership/Decision Making

- Increased and scheduled information distribution to EOCs
- Require physicians to provide public health with contact information when renewing licensing
- Do a real exercise that will focus on the types of real data that will be available
- Delve deeper into issues identified
- PHSKC needs to sit down with the Executive's Office to discuss possible triggers. Do not make the criteria publicly available. Make the decision and process publicly available
- Continuing dialogue involving middle and lower level players
- Address ongoing (4 weeks to 2 years) nature of events and the long term effects
- Discussion on continuity of efforts and RECOVERY—which should start early in the process
- I don't have any more to add to what was white-boarded
- Leaders working closer together for decision-making, messaging, media, what are essential services, police powers
- Continue to work together and learn together

APPENDIX B - Summary of Results

- Education of the public
- Most government departments/employers still need more detailed plan of their workforce plans. Who comes to work? Who stays home? Shifts working from home?
- By the way, I didn't see restaurants listed on the social distancing chart
- Include in response plans: how will coordination happen with Sea-Tac airport/CDC quarantine statutes in the event of provisions or quarantine of an airplane?
- More frequent and more public conversations between political/govt leaders and other community leaders
- Inter-governmental agreements to follow public health instructions
- Legislative clarity for police authority of local health officer
- Ongoing practice/planning
- Continuing involvement of multiple groups/organizations over time

Health System Surge Capacity and Resource Management

- More planning; community involvement
- Set deadlines for benchmarks on plans
- Come back next year with exercises to address actual plan
- Evaluate education and training implementation
- Take more time with each segment and press the details. When you talk about issuing antivirals get down to who, how, when, why and how will it change with new information.
- Union involvement and HR relations
- Additional public and physical education
- Lobby for political support
- Discuss in some detail the plans to communicate out especially taking into account our non-English speaking populations and having a united message
- Continue discussion/table top on issues in more depth. Supply chain—how will that work? How to deal with large numbers of deaths and what to tell people. What to do at the clinic level
- Some services need to be decentralized—peds, etc. Consolidating critical services may not be feasible with limited infrastructures
- Link community physicians and hospital systems for communication
- Consistent messages will be critical
- Supply chain issues
- Need more plans for worried well that use resources other than public health and health care facilities
- Plans for getting supplies other than medical, e.g., food
- How will we sustain and retain our staff over time?
- What about some exercise that will help leaders break out of their usual approach and help overcome the inertia so they can attempt to plan for an event that will require a novel response. Like 3rd world mass casualty style response or fully decentralized model of extensive home care instead of institutional settings and large alternate care facilities.
- Individual MDs at medical centers must get involved in this planning for collaborating between medical centers
- I am impressed by the smart, dedicated, and out-of-the-box thinkers in PHSKC and the broader response community to address this challenge. Many issues have been identified, but I think there is going to be a significant challenge to provide solutions or guidance from PHSKC to the broader public health community. One suggestion is that PHSKC work with their partners to identify the most urgent priorities to address. The coalition appears to be a forum to identify the key issues and drive them to resolution. There is a part of me that fears the urgency to address this issue is beginning to wane within some communities. I suggest a group take a realistic look at deaths, shortages, and chaos and think about potential response strategies
- Speed up development of plans that achieve self-sufficient response as well as joint response; We all need to be on the same page through a mass pandemic of this level
- Infrastructure in place

APPENDIX B - Summary of Results

- Staff training and education
- Solid communication
- Make this a state priority and put money into it that supports that
- Staffing is very difficult now, let alone then. With the current staffing problems we should start to look at our practice now and look at different staffing models now and not wait until it is an emergency. Ex. Team leading vs. primary care

4. What was the most valuable part of the exercise?

Communicable Disease Surveillance

- Ideas and suggestions from a variety of sources
- Exposure to the current plans in place from the public health department and hospitals represented
- Hearing what plans are in place; hearing important questions raised that need to be considered
- Hearing from the different areas of focus
- Seeing the major gaps—depending on health care professionals rather than on public responsibility
- Open airing of limitations and concerns
- Opportunity for communication between PH and other institutions; from the comments, it appears there are big gaps between groups response
- Networking
- The interaction the format allowed. Extremely valuable for identifying our own gaps and in learning where PHSKC is in planning
- Comments from the players and audience regarding activities in progress for pandemic planning; very valuable experience
- Meeting the partners in the community, having an open, frank discussion; hearing what other institutions are doing
- Identifying main players in this scenario
- Bringing up subjects that I need to address within my facility
- Debrief; what a great space!
- Talk about communication and where gaps exist
- To know that critical entities are and have been planning for crises and disasters well ahead of their arrival
- Range of experience of participants
- The interaction of the providers
- Identification of issues

Public Information Call Center (PICC)

- Identifying many issues that need to be addressed

Leadership/Decision Making

- The debrief got to the issues that still need to be addressed
- Overview of regional government preparedness for pan flu
- The issues discussion
- Identification of gaps
- Debrief
- Networking and overall involvement of various sectors
- Better understanding of government structure
- Hearing that the Executive's office plans to act on 5 cases
- It was encouraging to see/hear strength and clarity of leaders and emergency planners
- Identifying points of further work
- Round table discussion after the exercise
- Group interaction

APPENDIX B - Summary of Results

- Sharing of information
- Hot wash
- Debrief—identification of complexities and issues
- Raising important issues for future work
- Meeting many of the people I needed to, especially emergency management folks
- Debrief
- Getting leaders in room for decision-making discussions

Health System Surge Capacity and Resource Management

- Prior planning
- Hopefully....awareness
- Network, aid to planning organization drills
- Information sharing
- Helped me realize where some of the gaps are for our clinic and for larger community; Lots of work to still be accomplished
- The open and frank discussion
- Having all players at the table
- Understanding how the system will work
- Good mix of participants—various organizations. Good interactions
- People did not hesitate to point out shortcomings or possible weak areas
- Community discussion, information sharing
- The discussion, differing points of view, new issues provide amazing food for thought in our own planning
- Hearing where public health and other agencies are with planning
- That it happens at all
- Good facilitator
- Getting all these people at the same table!
- Listening to expectations of some of the organizations on others, e.g., the reliance that the hospitals have to get information, criteria, and guidance from PHSKC.
- Identifying goals that need to be achieved
- The expertise at the table

5. How could the exercise have been improved?

Communicable Disease Surveillance

- Facilitator did not follow the questions for the exercise in order. These questions appeared to be thoughtful and I would like to have heard the discussion
- More and varied people around the table; delve deeper into the issues
- Not sure
- This is greater than pandemic flu. Need to view in a larger scope of disaster preparedness and prevention of anarchy when social systems fail because the public is more dependent on social systems rather than personal responsibility. Need to emphasize personal responsibility rather than on the public health care systems
- Slow down the changing data and conditions (moved too quickly through changing circumstances)
- Don't debrief during exercise. Cover the "what to do" part then discuss problems. Stay on topic—discussion turned away from surveillance to infection control
- Interesting topics—more time; felt areas cut off because would be dealt with at another training with different people
- It would have been helpful to address more of the questions on the slides
- Too general
- Repeat these types of sessions periodically
- Provide a list of contact information for observers and presenter; if people could bring their previously prepared materials to share

APPENDIX B - Summary of Results

- Would have liked more input/questions from observers during the tabletop
- Need a whole tabletop on what happens when daycares close, only buses running yet social distancing needed, etc. Also on staff training
- Keep exercise scenario in view so participants and other can remain on track or can refer to situation to test assumptions or statements
- More emphasis on earliest stages; just before pandemic; more concrete level
- Include Highline Hospital—they receive most travelers with illness from the airport

Public Information Call Center (PICC)

- Well done for the first stab of a comprehensive exercise

Leadership/Decision Making

- During the exercise, perhaps the presence of elected officials focused the players on what the strengths of the plans are, at the expense of identifying gaps
- I think too much time was spent on early messages. Issues seem to be more pronounced at later messages, with not as much time for discussion
- I was interested that there were no media people as observers; to the extent that this is a learning exercise, it seems that they could use the training as well
- The space allocated for observers was really crowded. I would have liked to see a representative of faith communities (church council of Seattle, for example) at the table top
- Fewer messages try to focus and discuss deeper on particular issues
- Perhaps starting with an overview of what has been worked on already. We got a little bit of that at the end. People need to understand that this is so complex we need to focus on how we interact as leaders
- More clarity on the goal of the exercise. People wanted to drill down and that got a little off track from Leadership theme
- More significant scenarios (increase number of cases)
- Errors in scenario (e.g., antiviral message when strategy is to dispense only for ill patients)
- Facilitator is key. Need someone who understands and can paraphrase issues better. Facilitator could not cut off non-specific political remarks and encouraged speakers to answer actual questions (e.g., who goes to the EOC, etc.) Should get another facilitator (Swine flu episode still presented more cases of flu than had cases of GBS). Need to allow time to get into issues rather than just raising them
- Need to move to implementation levels now
- I think it was well done!
- Willingness to probe deeper
- In such a short exercise it may not be possible, but it would have been great to get more into the depth of the issues identified during the debrief
- Going deeper—what happens with many more cases, deaths, time (3 months), healthcare system being overwhelmed, etc.
- Nice job
- Create scenario that stresses the decision-makers process more. This scenario allowed leaders to be somewhat glib in their decision-making; the facts will be more difficult to interpret and what to do in the event will be less clear than as presented in the scenario
- More participants/leaders from smaller regions (I know more were invited but didn't attend—not much you can do about this)

Health System Surge Capacity and Resource Management

- More talk on alternate core planning; other agency involvement: 1) food suppliers; 2) media
- Scenario was not realistic enough
- Include law enforcement and schools
- Involvement of more private sector suppliers—supply chain is going to be a big problem
- Could benefit by having a list of commonly used acronyms in packet
- Continue tabletops over time as planning develops

APPENDIX B - Summary of Results

- Scenario was not realistic—I believe it would move faster and impact hospitals and overwhelm them sooner. It needs to be responded to as a community/home-based event not an institutional event
- The length was about right for this topic, but topics within this could justify additional exercises—especially communication, media, medical examiners, business, funeral homes, etc.
- Great exercise! Thank you all organizers! Keep it going
- Just right for this time (4 hours). Suggest future discussions focus on how to address the chaos and shortages of staff/meds, etc.
- The exercise did not address all critical elements of mass care resource allocation but most. Need medical examiners and law enforcement at the table
- Involve media; involve local community leaders, non-medical, to hear their concerns and thoughts

6. Other comments

Communicable Disease Surveillance

- It does not appear that the role of Home Health Care has been defined in pandemic preparation in general. Nor did it sound like there is understanding of the role of home health care
- The exercise did not include the critical element of public personal responsibility in prevention
- Was hard to keep discussion centered on surveillance

Public Information Call Center (PICC)

- None

Leadership/Decision Making

- Exercise met stated objectives 1, 3, 4, 5 (bullet points listed in PPT) but not #2
- Thanks!

Health System Surge Capacity and Resource Management

- Thank you. Great job
- Great job PHSKC in bringing together a broad and diverse set of problem holders. Keep pushing the envelope

PLAYER Post-Exercise Evaluation: Responses to Open Ended Questions

What was the most valuable part of the exercise?

Communicable Disease Surveillance

- Key players present—good discussion during and after
- All of it
- Meeting at the same table with partners across the healthcare spectrum
- Opportunity to learn how healthcare facilities would share information
- PHSKC level of participation

Public Information Call Center (PICC)

- Seeing how the PICC operators handle the various scenarios and personalities thrown at them
- As a SFD employee, knowing this is in place and being trained for. It gives me confidence that calls I direct here are being handled and not blown off
- The chance to participate and be able to advise my supervisors of the progress and preparation being made
- Noting areas of improvement
- Just having the exercise is probably one of the most valuable parts. I think this will be a good tool regardless of the situation. Training people (PH) up on call center duties is a necessary resource to maintain
- Learning what the PICC will/can cover
- Listening to the responses; “pretending” to be Darth Vader
- Finding out that there were equipment issues—gives us the opportunity to address that issue and hopefully prevent the public from equipment issues
- Hearing what scenarios might really happen
- Working through the kinks
- Debriefing
- Simulated calls were good; the volume, though high, was good training for those of us who are out of practice with high volume, stressed callers, etc.
- Experience on the phone
- Practice
- Problem solving, experiencing the volume of calls
- The whole exercise was valuable
- To find out what we need to change
- Simulation of calls and updates both written and verbal
- Actually testing the technology involved in an “overwhelming” call volume scenario.
- Making calls, asking questions
- Understanding the role of the PICC
- Reality, understanding other staff roles
- Team work between leads and supervisor was awesome
- Training was put together as realistic as possible

Leadership/Decision Making

- Interactions with others on this topic
- Networking
- All aspects of the exercise were valuable. Having good diversity in participants and active participation from LHO, County Executive, and some of their key staff was helpful
- Multi-discipline reps at table sharing knowledge and information experts
- Meeting partners
- Dialogue at the end

APPENDIX B - Summary of Results

- Identifying issues and direction from Executive
- Discussion of leadership roles and authorities, particularly with elected officials
- The debrief; greater breadth of issues/questions than the working exercise
- Debrief
- Broad range of issues; wide range of experts and organizations
- The discussions and comments from both players and observers

Health System Surge Capacity and Resource Management

- Dialogue with public health and other medical facilities
- Listening to medical treatment centers, trying to think through a response and coming to a conclusion that they must work together
- Dialogue between participants at highest level
- Hearing responses from a variety of perspectives
- Seattle Fire participation, they added some great insight for hospital response
- Exchange of views/information/planning regarding a regional mass critical event
- Identifying major shortcomings, i.e., all facets of alternative care facilities
- Listening to the dialogue between PH and hospitals
- Reconfirmed the work that needs to be done and areas of most concern in terms of planning
- Personally, learning from others; evaluating my own facility preparedness track and progress; better understanding of regional preparation. As a group: continue to identify ways to work together; identify gaps; keep the urgency fresh
- Listening to other approaches that various hospitals and public service members are doing and planning to do in the event of a pandemic

How could the exercise have been improved?

Communicable Disease Surveillance

- Superb; perfect
- The scenario moved too far between the first asset of questions and the second—it would have been useful to have an intermediate stage where tracking of individual cases was still useful, but there was more volume than in the first set of questions
- “Minor” role facilities better represented
- Would have been helpful to know what materials to bring/share
- Attention to specific questions distributed with each situation update

Public Information Call Center (PICC)

- By continuing this exercise for PICC
- Well, dropped calls/equipment problems weren’t good, but then again, that’s why we drill
- Much discussion already on equipment malfunctions—but otherwise, I think it was excellent
- Flip the simulator position with the call center staff next time. Might help train twice the staff
- More detailed resources to give out
- I think it went really well other than the equipment issues
- Having all the equipment “bugs” worked out. Perhaps a better understanding of the referral process
- I think most of the callers would not have been as patient as we were—they won’t want to be transferred or given phone numbers
- More info on the PICC plan
- Less wait time between scenarios; more training for operators
- More spacing out of people—better social distancing
- Information and work space needs to be organized better for operators
- Already listed in debrief
- Clearer messaging; bullet points
- Having supplies and resources ready
- Excellent job!

APPENDIX B - Summary of Results

- Better instructions
- Better phones and reference materials
- Double or triple the number of callers to make it even more realistic.
- I think this was a good exercise
- More training for call receivers on what to do with specific issues.
- More room
- Better room set-up, better organization of PICC room; phones for leads and supervisors and maybe a couple of people in “floater” roles (could be used by any of the leads to help execute anything that needs to be done—i.e., operator, photocopying, getting supplies)
- LOGISTIC PROBLEMS
 - Phones: when testing phone to make sure they were operational we would dial a phones designated number and a different phone would ring. Calling the same number a second time would ring to correct phone. Calls were dropping in cue. Headsets would quit working. 205-6330, when using headset on this phone, operator would be ending call and either caller would hang up and another caller would be on headset. Need person designated to Spanish messages for phone messages
 - Laptops: Need 25 ft cables for network connection; EH operators were having problems logging onto computer. Had to call MIS twice to get someone to troubleshoot. Would be helpful to have MIS person on hand to help with computer problems
 - Room set-up: Need tables set up for leads and supervisor to work at. Computer – at least one to use as a resource computer to look up phone numbers or other information.
 - Manual: need tabs and index—color coded. P. 376 item A Keeney’s book. Ready index table of contents dividers
 - Job card section: appropriate forms for that job with job card. There should be a tab to put each individual’s job card in with all information to help do the job (reports job descriptions, forms, checklists, phone numbers, etc.); Forms section; current information tab for incident currently going on. Section that has each set of set up and take down
 - Operators should have “hot sheets” for easily accessible information or on the board to be able to look up at

Leadership/Decision Making

- It was good
- A little longer, engagement of more elected officials
- I wish there would have been more focus on medical issues
- Make the scenario harder—perhaps starting the pre-evaluation of prior to the event would have indicated our readiness to deal with tougher issues
- Needed more time. Too superficial on key issues
- Need to drill more into issues; it seems like we skimmed across some items
- More focused discussion about topics specific to health, fire, EMS, etc.
- The social distancing questions did not always match the updates
- Focus discussions more on targeted questions
- Participation by more elected officials; broader range of participants (law enforcement, small business, media.)
- Force issue of coordination between levels of government to be more fully addressed.
- Hoping for a future exercise on the medical community response
- Public reaction—economic losses, personal hardships, perceived disparities in who receives treatment/prophylaxis

Health System Surge Capacity and Resource Management

- Further emphasis and potential solutions to the staffing shortage and the implications for alternative care sites
- Additional players that were absent and SPD
- Need more private sector participants
- Include other partners—media, business

APPENDIX B - Summary of Results

- More time to flush out details and responses
- More valid reps, i.e. law enforcement, business
- I liked the idea of including other players; e.g. insurance companies, large employers, media, etc.
- It also would be good to incorporate some level of discussion recognizing the “full spectrum.” We had the players, but I found it hard to figure out where to interject on issues specific to ambulatory care community
- Additional partners at the table
- Suggestions given
- Continue to have drills

Is there additional information or training related to the subject matter that you feel you still need? If so, please explain.

Communicable Disease Surveillance

- Still work on how to engage the doctors/providers that are not hospital associated or parts of large networks
- Is IT (MIS/ITS) at all included in these exercises?
- Update as plan is developed to adjust surveillance procedures as pandemic evolves; Case, ILI #s

Public Information Call Center (PICC)

- Yes. From a liability point, operators must be cautious of making promises they personally cannot keep or expressing any personal opinion which might influence the caller's thoughts and actions. Don't let the callers “trap them”
- Yes, unsure of what other elements include
- Would like to examine PICC guidelines
- Just need to learn more and be able to be more confident about information being dispensed. Although there is a lot of information to become conversant with
- Actual messages, clearly stated that will be available during event
- Binder needs more specific information, need better/broader resource/referral information. Specify what resources/phone numbers should be used and when, why, for what (e.g., medical verses emotional verses...) p. 30 needs to identify the specific phone that needs to be used. As external liaison, where are my needed resources, phone/fax, etc.
- Mediation and stress management training

Leadership/Decision Making

- Continued networking
- I like the idea of a specific training for elected officials on their role in pan flu. Training on methods/approaches to communicate with EOCs
- Differences in cultural communities
- Communicating and maintaining message consistency across borders and jurisdictions
- Involving and educating the public now—respiratory etiquette, safeguards in health care settings, risks and options for response, acknowledging uncertainties
- Work with media in a sustained program—show the complexities and the decision making uncertainties
- This response will work only if there is trust and some level of consistency

Health System Surge Capacity and Resource Management

- Vulnerable patient populations; county organizations and volunteers
- Yes, never learned enough!
- Yes
- I could benefit from ongoing tabletop exercises—it helps me reflect on our own plans
- Business resumption—business continuity might be a good tabletop. Create a hospital example, players play roles when same or competing hospital

EVALUATOR Checklist Responses**Communicable Disease Surveillance Tabletop Exercise (n=4)**

Objective 1: Test and understand usefulness of influenza report forms in monitoring the needed epidemiologic/demographic characteristics of cases.					
	Yes	No	N/A	Not Observed	N/R
1. Were forms available for review?	4				
2. Did players provide feedback on form content?	4				
3. Was there dialog among players regarding usefulness and usability of forms?	4				
4. Did Public Health take into consideration concerns about the reporting forms?	4				
5. Was the exercise objective met?	4				
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: It was internal—external more user friendly 2: aggregate form: Link to online system—well discussed and feedback provided; Please add definition of ILI to forms The 1st form was not developed for “external use,” rather what was shared was for “internal use” only—internal=PHSKC It was not the right form, but did receive feedback on what might be inform Issues: <ul style="list-style-type: none"> Implement ICS before it gets further or more cases reported—earlier rather than later. How to get messages out? Multiple forms of messages (information overload) Public Information Officers Stress multiple communication strategies Develop different form than what was shared Syndromic surveillance limitations (what they already collect) Each shared reporting form for internal processes Raised issues of where to get employee data on absenteeism Raised suspension of non-essential services (emergencies center) Issue of HIRRA (health officer has authority) Communication issues/families inside hospital Planning (plan in place) to validate messages Lack method to get forms out Healthcare worker identity if admitted to other hospital. 					
Objective 2: Discuss reporting of persons hospitalized with pneumonia (medical floor and ICU admissions).					
	Yes	No	N/A	Not Observed	N/R
1. Were hospital reporting procedures discussed?	4				
2. Did hospital players have knowledge or standard operating procedures defined on how to report suspected cases?	4				
3. Did Public Health have feedback for hospital's reporting process?	3			1	
4. Did the hospitals express a possible change in current practices?	3			1	
5. Was the exercise objective met?	3				1

APPENDIX B - Summary of Results

Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: situation specific but clearly identified on all communications. Yes and how it changes from 1—aggregate report 2: they have some SOP that they'd follow until changes in request 4: Discontinue reporting of certain diseases; Emergency Operations Plans will be activated Staff screening There was not much discussion/detail on specifics, but rather deferral to existing systems. Good to hear concern for non-inst folks—HCH, Shelter care Home health programs reporting into parent organizations/hospitals. Issue PHSKC with new move to aggregate reporting Add definition of ILI at the top of form Issue raised about staff retention during pandemic Individual will be on “wards”—not “rooms” Issue role of healthcare training—research says better trained workers performed better Taking into account vulnerable populations Paradigm shift turning flu patients away 					
Objective 3: Test CD Epi channels of communication to disseminate case definition of influenza with health care community.					
	Yes	No	N/A	Not Observed	N/R
1. Was CD Epi's description of their communication process clear?	3	1			
2. Did players receive an understanding of how CD Epi would communicate case definition during a pandemic?	3	1			
3. Did CD Epi have alternative forms of communication planning during a pandemic?	4				
4. Did hospitals have alternative forms of communication planning during a pandemic?	1			3	
5. Was the exercise objective met?	3			1	
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: Because system not developed 2: Sort of; not really at an operational level 3: To some extent, but these were communicated; Doesn't seem so...not beyond what they have now which isn't much...Fax, Web, listserv.; Including field Epi teams as needed. 4: Did not hear from all agencies State licensing-email-advocacy; big communication challenge, information overload, connect public to source. Multiple communication channels a problem Issues of inconsistent/multiple messages leading to information overload. Need to develop coordinated systems. PIOs should be linkage for public/media. Issue—after flu outbreak—hospitals would have to focus on preventing injury—psychiatric patients that present. Other health issues that need to be dealt with 					
Objective 4: Describe ability of health care facilities and public health clinics to receive messages from CD Epi and disseminate to health care providers in their practice setting.					
	Yes	No	N/A	Not Observed	N/R
1. Did CD Epi define their process for receiving and disseminating information within the healthcare system?	4				
2. Did healthcare organizations define their process for receiving up to date information from CD Epi, and methods for dissemination within their organization?	4				
3. Have healthcare organizations considered staff shortages, or failure of email or phones when discussing disseminating information within their organization?	3			1	

APPENDIX B - Summary of Results

4. Was the exercise objective met?	4				
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: Better description of current communications infrastructure- fax and listserv, media, etc. Disconnect with contact person and interpreter responsible. 2: Identified limitations and non-existent systems for broadcast within large organizations. Communications and EPOs in place. 3: But not specific to plan; This was touched on, but not too much explicit discussion Still not clear on how hospitals manage communications internally—very variable Ambulance care-RMRC; hold on other disease reporting Good description of the variety of data sources: schools, hospitals, pharmacies, moving to business absenteeism, Am Care-Sentinel system of reporting More planning happening around these issues. 					
Objective 5: Evaluate ability of healthcare facilities to follow infection control guidelines for management of suspected cases of influenza A H5N1.					
	Yes	No	N/A	Not Observed	N/R
1. Did healthcare facilities provide information regarding their information regarding their infection control guidelines of suspected cases?	3	1			
2. Did public health provide feedback on healthcare facilities infection control guidelines?	3			1	
3. Were healthcare facilities given enough information to strengthen infection control guidelines?	1	1		2	
4. Was the exercise objective met?	4				
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: Sort of...just that they'll be jumping into overdrive re: education—yes, heightened employee health services. The discussion centered around infection spread (tracking, monitoring, investigation) but not "control" Training of staff in relation to PPE and infection control. 					
Objective 6: Assess ability of healthcare facilities to obtain and process specimens for diagnostic testing.					
	Yes	No	N/A	Not Observed	N/R
1. Did healthcare facilities demonstrate an understanding of how to obtain and process specimens?	1	1		2	
2. Did public health provide clear feedback regarding healthcare facilities processing of specimen for diagnostic testing?	1	1		2	
3. Was the exercise objective met?	1	2			1
Comments: <ul style="list-style-type: none"> Usual practice will suspend after certain threshold. 					

PICC Functional Exercise (n=2)

Objective 1: Test PICC procedure manual—Operator guide, usability, clarity, job cards.					
	Yes	No	N/A	Not Observed	N/R
1. Was the manual and operator guide easy to use during PICC activation?	1	1			
2. Did the operator guide provide operators with clear direction?	1		1		
3. Did the operators utilize the operator guide during activation?	2				

APPENDIX B - Summary of Results

4. Did the job cards provide clear, complete and accurate information for the staff of the PICC during Just-in-time training?	1				1
5. Did the supervisor utilize the PICC Manual during activation?	1			1	
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: Not familiar enough 3: Needs more time to review 5: One observed Coached “in our opinion” and “as we understand it” mass mailing of web address a lot of giving out web address; refer to channel for information; refer to manual often; “hold message recording”; “prerecorded messages” Should we use voice recorder next year? Add note to sups, checklist to call MIS and let them know we’re activating 25 ft network cards needed Telecom issues—calls going to wrong line when coming in (not on UCD) but when phone used to call out, correct # on caller ID Morgan’s phone would not log in Operators sounded professional and knowledgeable Telecom issue—simulators got static and dropped call Telecom issue—operators can hear them even when Sims on hold JIT Training—some people didn’t get messages to give out No way to take a quick break to do paperwork without getting back into queue Labels should have been done at set-up Background noise from handset In new building, we should only have digital lines in rooms for call centers-need 1 analog line for fax machine Need instructions on how to hold on analog phones Would putting them on hold set them up to get another call? Someone from telecom should be at next PICC—too hard to re-create technical problems later Phone list Terry did worked better When headset taken off, calls stopped dropping off for one operator MIS available during activation Array of difficulties of telecom problems Room talking over and across. 					
Objective 2: Test PICC operator’s ability to manage large volume of calls.					
	Yes	No	N/A	Not Observed	N/R
1. Were operators handling the volume of calls?	1				1
2. Did the operators appear to be able to limit length of call time to under 4 minutes?	2				
3. Did the operators handle stress of activation?	2				
4. Was the exercise objective met?	1				1
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 2: Lots of questions/confusion; handled this well—stressful in the beginning. Second round of calls less questions to the supervisors Good check-ins from supervisors Stress level handled well Operator stress handled well Equipment issue extended call problems Posted signs helpful with reminders of phone numbers Seemed the were taking the calls fine during first round 					

APPENDIX B - Summary of Results

<ul style="list-style-type: none"> All operators were on phone at same time – looked good After it was recommended that callers let it ring, simulator counted 25-30 rings. 					
Objective 3: Verify PICC operator's ability to deliver messages to the public.					
	Yes	No	N/A	Not Observed	N/R
1. Did the operators know where to find information?	1	1			
2. Did the operators follow proper ICS structure to obtain additional information?	2				
3. Were supervisors adequately supporting operators delivery of messaging?	2				
4. Was the exercise objective met?	2				
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 2: As calls went on this integrated; ask supervisor questions 3: As best they could Divide info given to operators into smaller chunks in the manual Have chairs facing projector (change map) PICC supervisor should have several phones Cell phones for support staff. Media questions where? Repetitive questions from operators Avoid writing on memo pads and not on log sheet. Fill in only once. 					

Leadership-Decision-Making Tabletop Exercise (n=6)

Objective 1: Test the information and the criteria needed to implement social distancing measures					
	Yes	No	N/A	Not Observed	N/R
1. Did the Public Health players present a clear set of criteria by which they would decide to implement social distancing?	5	1			
2. Did the players express differences of opinion about whether or when social distancing was necessary?	2	3		1	
3. Did the players discuss how to arrive at a common understanding of the circumstances in which social distancing would be implemented?	3	2		1	
4. Was the objective met?	5	1			
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: 5 cases (Dr. Duchin attending IOM meeting); no, but PH did indicate that criteria are complex and decisions are still being formulated 2: mildly; different understanding 3: Not explicitly; through EOC protocol 4: partially, all agreed to PH criteria; qualified KC plan doesn't specifically address social distancing KC has a trigger of 5 cases in KC before instituting social distancing After 5 cases, LHO can institute social distancing City plans roll-up to KC consistently Difference of opinion regarding when to give out antivirals and who gets them. Issues raised around worker fear of reporting to work prior to implementation of social distancing. I think the scenario messaging was inconsistent in supporting the evaluation of the exercise objectives. Answers came very quickly and definitively but situation will be more complex. Beyond "5 cases", there was little discussion until the debrief about the type of information and criteria needed to trigger social distancing. Impression that emergency management feels need to set criteria/threshold for implementation of 					

APPENDIX B - Summary of Results

<p>social distancing measures, which may be at odds with information about the disease yet to be learned. The public will latch onto a specific number and then lose trust in the decision-makers when “flexible execution takes place”</p> <ul style="list-style-type: none"> Common messages: Ron Simms: 5 cases trigger social distancing; would not jump to social distancing until 5 cases; local cities roll up to KC and then state 					
Objective 2: Identify how a social distancing policy applied broadly in a pandemic will affect various sectors (government, private, non-profit, public).					
	Yes	No	N/A	Not Observed	N/R
1. Did players discuss affects of the social distancing across various sectors among themselves?	6				
2. Did the players seek input from the content experts or the observers about the affects of social distancing?	5	1			
3. Did the discussion touch each sector? <ul style="list-style-type: none"> Government? Private? Non-profit? Public? 	4	1		1	
4. Was the exercise objective met?	5	1			
<p>Comments:</p> <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: Broadly, not specifically; workplace, schools, media, CD/Epi 4: partially Mayor of Kent was not sure of authority to shut businesses down Key players from govt, private, non-profit, public sector need to be involved in decision-making so that they will not panic and follow direction Need to instill realistic expectations for social distancing All groups need to know social distancing is a local decision and federal messages are only advisory. Concerns expressed re: schools from tribe representative and others Helping kids near graduation is an issue to consider Many considerations re: trade and economy would be evaluated before PH would implement measures that would have significant impact on these things. Given the limited time, there was some discussion about the impact on various sectors, although the time constraints led to a fairly superficial discussion. The conversation began... Health Office, County executive has authority. 					
Objective 3: Assess readiness of emergency management partners to coordinate with the Local Health Officer (LHO) and Public Health –Seattle and King County in a health emergency.					
	Yes	No	N/A	Not Observed	N/R
1. Did the players understand and accept the authority of the LHO in this situation?	6				
2. Did the players offer suggestions from their fields for how to support the decisions of the LHO?	3	2		1	
3. Did the players support the decisions of the LHO (even if they may have expressed initial resistance)?	4			2	
4. Did the players discuss how they could support implementation of the LHO's direction in their function or region?	6				
5. Was the exercise objective met?	6				
<p>Comments:</p> <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: mostly, passively 2: somewhat; coordinating through EOCs 3: no resistance 					

APPENDIX B - Summary of Results

<ul style="list-style-type: none"> 4: somewhat; EOC support through coordination, regular briefings and organized community response; DOH would be working with all LHJs across the state; EOC Responses seemed unanimous that they would coordinate with LHO Tribal rep stated reliance on LHO and EOC. Suggested that RDP would be followed-currently, nothing outlined in RDP/ESF8 re: social distancing Situation update #1-slide 7: skipped over the fact that meetings would be conducted via teleconference or E-briefings—may have impact on organizing public messaging. Verbal agreement about authorities of LHO, but not much discussion about coordination. The assumption is that coordination will occur in the EOCs but that assumption wasn't really tested. LHO will feel pressure from EM to activate plans. Healthcare community leaders, along with PH, are major players/decision-makers in a medical emergency. Feds advisory for social distancing. Indian Country does things face to face. 					
Objective 4: Determine how elected officials and government agencies can best communicate their support of LHO decisions regarding the protection of public health (i.e. social distancing, shifts in health care system)?					
	Yes	No	N/A	Not Observed	N/R
1. Did the players discuss how they would communicate their support of the decision?	5	1			
2. Did the players discuss how they would communicate LHO decision to various audiences? <ul style="list-style-type: none"> Their employees? The public? Their partner agencies? 	2	3		1	
3. Was the exercise objective met?	5	1			
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: implementation of decision would show support; briefly 2: not thoroughly; shifts in assessment strategies/locations at hospitals; not specifically Good comments at stating unified messages, but most comments were from PH staff. Communication of implementation and support would occur through organized communication efforts, EOC briefings. Public Health communications responsibility and strategy was discussed, but the other players didn't describe their communications approach. Again, there is an assumption that the various EOCs will carry forward consistent messages. Identified as a significant issue. Education; massive op ed. 					
Objective 5: Identify how decisions regarding social distancing will be best communicated to the public.					
	Yes	No	N/A	Not Observed	N/R
1. Did the players discuss what information would be communicated?	4			1	1
2. Did the players discuss who would be the most appropriate spokesperson(s)?	4	1			1
3. Did the players discuss the timing of the release?	4	1			1
4. Did the players discuss a unified message including from various sources (Exec, Public Health, etc)?	4	1			1
5. Was the exercise objective met?	5				1
Comments: <ul style="list-style-type: none"> Everyone having the same message-but mostly public health staff made these comments. Need to find out cultural ways of learning and start educating ASAP. Parents not following school protocol—is that a police issue, school issue, etc.? Needs more education. Also, bringing children to work? 					

APPENDIX B - Summary of Results

- Strong leadership among elected officials critical for success
- Important to communicate thought process to public for buy-in of decisions
- Public education needs to be executed earlier—considerations of public impact should be considered early and addressed in messaging—i.e., childcare, access to income, transportation, etc.
- The PH and King Co PIOs will be leading the communication with the public, hopefully with media involvement, but there was not much discussion about the coordination among PIOs and other jurisdictions.
- Officials (for county) spokespersons need to be identified—there seemed to be some side-stepping of this issue.
- Effect on schools; social distancing in court system; policy guide for business; framing for first responders; PICC enhances EMS

Health System Surge Capacity and Resource Management Tabletop Exercise (n=3)

Objective 1: Determine the region's ability to manage staffing challenges.					
	Yes	No	N/A	Not Observed	N/R
1. Did organizations demonstrate knowledge staffing challenges?	3				
2. Did organizations discuss existing plans regarding how to handle staff shortages?	3				
3. Did organizations discuss the possibility of sharing staff with other organizations?	3				
4. Was the exercise objective met?	3				
Comments: <ul style="list-style-type: none"> • Comments on specific questions above: <ul style="list-style-type: none"> • 2: EMS/fire • 3: All currently share staff on per diem anyway; natural fall out • 4: limited • All acknowledged this issue is a huge challenge. • Richard did a great job pacing situation update #1! • Would directing public to contact primary provider overwhelm system? • Increase hospital triage to support public demands—would id separate flu triage site. • Increase staff education to support staff decrease. GH developed regional accommodation plan – objective 5; UWMC doing focus groups with staff to include them in planning process and foster buy-in • How will alternate care facilities be staffed? • Andy suggested alternate care facility patients bring a family member with them to be a care provider. • Plan needs options • Changing staffing options • Disallow people to enter fire stations 					
Objective 2: Evaluate the system for tracking and coordinating available medical resources (staffing and supplies).					
	Yes	No	N/A	Not Observed	N/R
1. Did the players discuss knowledge of existing tracking system for medical resources?	1	2			
2. Is there a mechanism to track staff availability in King County?		2		1	
3. Is the tracking system currently being used to track any medical resources?	2	1			
4. Was the exercise objective met?	2	1			
Comments:					

APPENDIX B - Summary of Results

<ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 2: Not yet, will be RMRC; Regional staff mentioned 3: Collecting information right now, not operational yet 4: Lots of work to be done; For the most part Hospital control tracks beds (not specifically mentioned in discussion). SNS supplies were mentioned, but access was questioned. GH-part of strategic plan includes re-distribution of supplies (internally to GH) Need PH lead for ethical decisions and consistent levels of care. Sharing of medical resources 					
Objective 3: Assess region's ability to address the potential security challenges associated with a surge in patients.					
	Yes	No	N/A	Not Observed	N/R
1. Do organizations have plans to address security during a pandemic?	2			1	
2. Have organization planned with existing security companies around business continuity during a pandemic?	1			2	
3. Do organizations have MOUs with the security companies that they currently contract with?				3	
4. Are security companies developing business continuity plans in the event of staff shortages?				3	
4. Was the exercise objective met?		2		1	
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 1: Mention of limited access to facilities and "lock-down"; HMC This issue received little time for development and discussion All have the ability to lock-down "Lock-downs" 					
Objective 4: Identify existing and alternative patient transport resources for patients identified as needing hospitalization.					
	Yes	No	N/A	Not Observed	N/R
1. Were existing transportation resources discussed?	1	2			
2. Are there existing plans in place with transportation companies to move patients within the healthcare system?	1			2	
3. Were alternate transportation resources discussed?	1	1		1	
4. Were barriers to transportation services identified?	1			2	
4. Was the exercise objective met?	1	2			
Comments: <ul style="list-style-type: none"> Comments on specific questions above: <ul style="list-style-type: none"> 2: EMS has response plan but not a movement plan 4: Identified through scenario partially Not much discussion around patient transport Most of focus was on alternate care facilities, staffing and antivirals Medical ethics big topic as well Delivery of babies during pan flu: Swedish will be able to segregate patients for safety purposes with cancellation of elective surgeries—OB last unit to shut down along with ED. This issue was not discussed other than in the context of EMS response plan. EMS becomes irrelevant if there is no where to transport patients 					
Objective 5: Test the health care community's ability to operationalize surge capacity strategies, such as alternate care facilities, altered staffing models, and altered standards of care.					
	Yes	No	N/A	Not Observed	N/R
1. Do organizations have existing plans for altered standards of care within their facilities?	3				

APPENDIX B - Summary of Results

2. Do organizations have existing plans to alter staffing models due to staff decreases, and hospital beds at capacity?	3				
3. Do organizations have a triage system planned to redirect patients to alternate care facilities?	3				
4. Was the exercise objective met?	3				
Comments: <ul style="list-style-type: none"> • Comments on specific questions above: <ul style="list-style-type: none"> • 1: UWMC; Just starting conversation • 2: some—in progress/under development • 3: and shelters/homeless health • Evidence in discussion that organizations are aware of surge strategies. Actual plans may exist in some organizations, particularly larger ones with more resources. • What is plan for shelters? Will patients with ILI be sent back to shelter if they are not admitted to hospital? • IHC (Int'l Health Centers) would cancel regular services to support community demands • GH has regional altered staff model and patient reallocation plan • Evergreen working on internal staff training model to educate and encourage staff to come to work. • Home delivery of meds? Harborview suggestion to help keep ERs open. • Swedish work with home health providers—dispatch nurses electronically so they don't need to come to the hospital/clinic • Would work with homeless health clinics and shelters to support homeless communities. 					

**Public Health – Seattle & King County
Health System Surge and Resource Management Tabletop Exercise
Participant List**

Appendix C

Exercise Design Team

Diane Bonne
Public Health

Luann D'Ambrosio
Northwest Center for Public Health Practice

Cynthia Dold
Public Health

Maggie Jones
Northwest Center for Public Health Practice

Kay Koelemay
Public Health

Danica Mann
Region 6 Training and Exercises

Anne Newcombe
Harborview Hospital

Sarah Paige
Northwest Center for Public Health Practice

Sandra Senter
Northwest Center for Public Health Practice

Whitney Taylor
Public Health

Aimee Welch
Public Health

Exercise Players

Michael Barokas
Seattle Fire Department

Exercise Players (continued)

Tim Delitt

Harborview Medical Center

Alan Chun

International Community Health Services

Valerie Dinsdale

Overlake Hospital

Jeff Duchin

Public Health

Charissa Fotinos

Public Health

Luis Gonzalez

Overlake Medical Center

Tom Gudmestad

Public Health

Bryan Hastings

Seattle Fire Department

Rayburn Lewis

Swedish Medical Center

Kathy Lindsey

Virginia Mason Medical Center

Chris Martin

Harborview Medical Center

Evan Oakes

Community Health Centers of King County

Dave Owens

Washington State Department of Health

Michelle Pennylegion

Public Health

Jeff Perry

Group Health

Exercise Players (continued)

Lewis Robinson

Public Health

Fred Savaglio

Virginia Mason Medical Center

Jeff Sconyers

Children's Hospital

Allison Shletzbaum

Regional Medical Resource Center

Walter Sidles

Group Health

Andy Stevermer

Department of Health and Human Services

Tamlyn Thomas

UW Medical Center

Exercise Observers

John Arveson

Washington State Medical Association

Karen Blankenship

Virginia Mason Medical Center

Johnny Carrillo

Group Health

Mary Catlin

Public Health

Marina Counter

Public Health

Joe Cropley

Washington Poison Control

Ailish Daly-Walker

International Community Health Services

APPENDIX C - Participant List

Exercise Observers (continued)

Lynn Elder

Virginia Mason Medical Center

Cassie Glecker

Puget Sound Blood Center

Stacia Gloman

Swedish Hospital

Rose Greenbaum

Swedish Hospital

Ben Haskell

Seattle Fire Department

Sylvia Heitzman

Swedish Hospital

Barb Jensen

Evergreen Hospital

Janelle Jacobs

International Community Health Services

Judi Jones

Public Health

Jonathan Larsen

Seattle Fire Department

Anne Lesperance

Pacific Northwest National Laboratory

Kathy Mahar

UW Medical Center

Eileen Newton

St. Francis

Anne Newcombe

Harborview Medical Center

Exercise Observers (continued)

John Pauk

Swedish Medical Center

Steve Stein

Pacific Northwest National Laboratory

Michael Swenson

Evergreen Hospital

Karen Waxdahl

Swedish Hospital

Michael Wilson

Snoqualmie Valley Hospital

Exercise Evaluators

Luann D'Ambrosio

Northwest Center for Public Health Practice

Kay Koelemay

Public Health

Danica Mann

Region 6 Hospital Training and Exercises

Exercise Staff

Cynthia Dold

Public Health

Richard Marks

Consultant

Aimee Welch

Public Health



Pandemic Influenza Exercise Series - 2006

Health System Surge
Capacity and Resource
Management Tabletop
November 3, 2006

[Welcome...as you get settled:]

- Familiarize yourself with the materials in your packet
- Complete pre-exercise evaluation form (green)

Welcome

- Introductions
 - Please stand
 - State clearly and loudly:
 - Your Name
 - Your Agency/Organization
 - Your Role
- Agenda

[2006 Pan Flu Exercise Program]

- Communicable Disease Surveillance Tabletop -- October 6
- Public Information Call Center Functional Exercise -- October 13
- Leadership and Decision Making Tabletop -- October 27
- Health System Tabletop -- Today

Exercise Evaluation

- Study with PHSKC and NWCPHP, UW
 - Pre-exercise survey (green form in packet)
 - Complete and collect before exercise
 - Post-exercise survey (yellow form in packet)
 - Complete and collect after exercise
 - Results reported in aggregate

****If you need to leave early please complete post survey and return to registration desk.**

Acknowledgements

NWCPHP

Exercise Program:

- Jack Thompson
- Andy Stergachis
- Carl Osaki

Evaluation Design:

- Luann D'Ambrosio
- Maggie Jones
- Sarah Paige
- Sandra Senter, Group Health

Acknowledgements

Design Team Members

- Danica Mann, Region 6 Hospital Preparedness Manager
- Anne Newcombe, Harborview Hospital
- Cynthia Dold, PHSKC Hospital & Healthcare Coalition Administrator
- Aimee Welch, PHSKC Community Clinics Liaison
- Kay Koelemay, PHSKC CD-EPI
- Whitney Taylor, PHSKC Preparedness
- Diane Bonne, PHSKC Preparedness

Purpose

- Improve coordination
- Increase awareness of medical surge challenges
- Test plans developed to date
- Identify strengths and gaps
- Generate next steps items

Objectives

- Determine the region's ability to manage staffing challenges
- Evaluate the existing system for tracking and coordinating available medical resources (staffing and supplies)
- Assess anticipated needs for pharmaceuticals, and other consumable and durable resources

Objectives

- Identify existing and alternative patient transport resources for patients identified as needing hospitalization
- Test ability to operationalize potential surge capacity strategies, such alternate facilities, canceling elective surgeries, implementing altered standard of care models.

[Tabletop Instructions]

- The scenario
 - Updates
 - Messages
- Handouts
- Play your role
- Respond in real time
- Take notes
- Breaks
- Debrief



Questions?



Pandemic Influenza Exercise

Situation Update 1

Exercise Simulated Date:

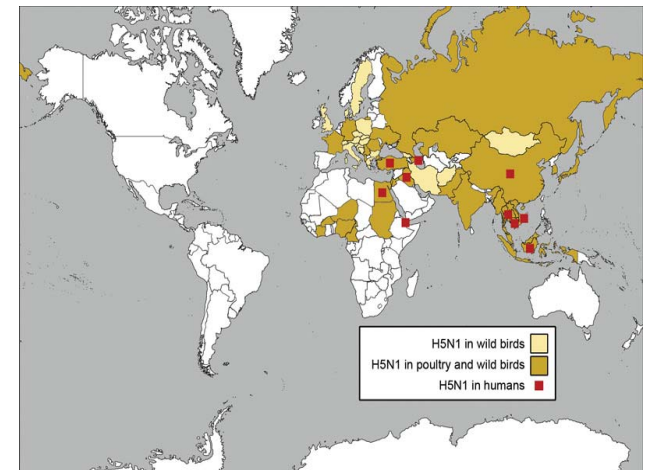
November 3, 2006

Situation Update #1

November 3, 2006

Worldwide -- In the Past Year:

- Localized Type A Subtype H5N1 Influenza outbreaks spread in last year
- World Health Organization Pandemic Alert Phase 3



Situation Update #1

November 3, 2006

Worldwide Since September:

- H5N1 cases spread to Western Europe
- Type A Subtype H5N1 cases have doubled
- 300 people have died
- TODAY: WHO raised to Pandemic Alert Phase 4



Situation Update #1

November 3, 2006

United States:

- CDC: 12 Type A Influenza cases in US
- US moves to Response Stage 4



- Antiviral medications are being shipped to states for local distribution

Situation Update #1

November 3, 2006



United States:

- Officials are meeting or diverting international flights
- Federal government issues guidance to limit all non-essential travel

Situation Update #1

November 3, 2006

King County:

- Public Health announces:
 - No vaccine available at this time
 - Limited antiviral medications



Situation Update #1

November 3, 2006



King County:

- Public Health releases extensive public education messages
 - Stop Germs!
 - Caring for ill
 - Medical care
- Hotlines and websites active

Situation Update #1

November 3, 2006

King County:

- Public Health activates ICS/EOC
 - Coordinates with State and officials
 - Conducts Partner Briefings
- King County OEM activates RCC
- Meetings conducted by:
 - Video and teleconferencing
 - E-briefings



Situation Update #1

SUMMARY

November 3, 2006

WHO Alert: Phase 4

U.S. Response: Stage 4

CDC announces first US cases today

PANDEMIC INFLUENZA

WHO Global Pandemic Phases and the Stages for Federal Government Response

WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Pandemic Influenza Exercise

Situation Update 1

Exercise Simulated Date:

November 10, 2006

Situation Update #1

November 10, 2006

Worldwide:

- Panic increases in urban centers across the globe
- Jurisdictions are implementing a variety of social distancing measures



Situation Update #1

November 10, 2006

Worldwide:

- TODAY: WHO raised to Pandemic Alert Phase 5

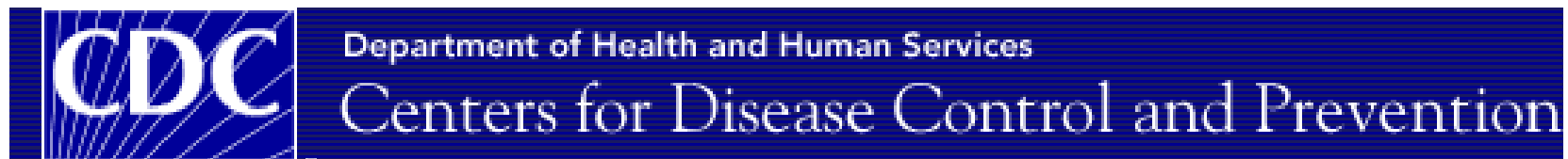


Situation Update #1

November 10, 2006

United States:

- US cases have tripled in 3 weeks from 12 to 36
- CDC advises local health agencies to be ready to implement disease control initiatives as needed



Situation Update #1

November 10, 2006

King County

- International passenger
 - Flu-like symptoms
 - Isolated at local hospital
- Other passengers placed in home quarantine
- Visiting passengers provided local accommodation for quarantine



Situation Update #1

November 10, 2006

WHO Alert: Phase 5

U.S. Response: Stage 4

36 cases in US

None in King County

Day 8 since first US case

PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Pandemic Influenza Exercise

Situation Update 1

Exercise Simulated Date:

November 17, 2006

Situation Update #1

November 17, 2006

Worldwide

- WHO declares a Pandemic
- Phase 6 – the Highest Level



Situation Update #1

November 17, 2006

United States

- 1,580 H5N1 cases confirmed
- 36 people have died
- Homeland Security declares US Response Stage 5

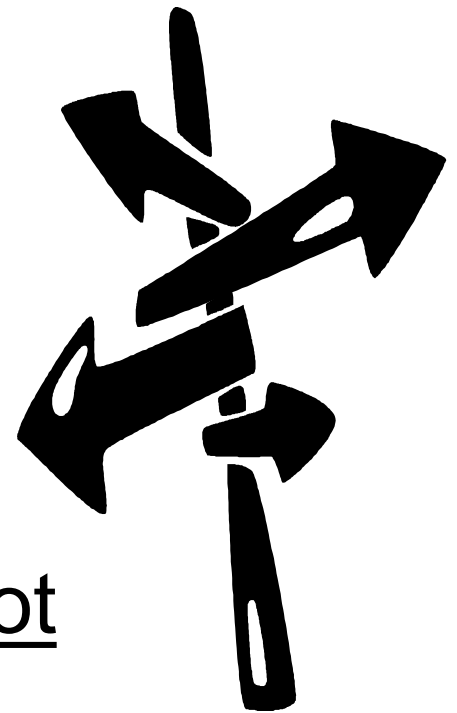


Situation Update #1

November 17, 2006

United States

- CDC recommends that local health agencies implement disease control measures as necessary
- Many communities choose not to act now



Situation Update #1

November 17, 2006

King County

- 19 confirmed cases
 - Overseas travelers
 - Close contacts
- Hospitals and clinics:
 - Securing supplies
 - Crowded with “worried well”



Situation Update #1

November 17, 2006

King County

- Public Health:
 - Issues health access messages
 - Hotline and websites active
 - Reinforces hygiene messages
- Absenteeism in schools and a sentinel workplace is greater than 10 percent



Situation Update #1

November 17, 2006

WHO Alert: Phase 6

U.S. Response: Stage 5

King County:

- 19 cumulative cases
- 19 current cases

Day 15 since first US case

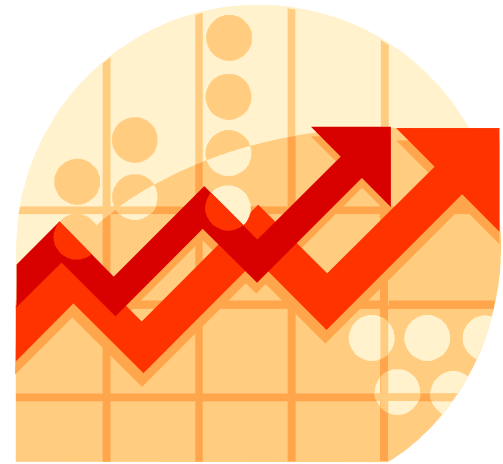
PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Questions?

Message 1

- Hospitals:
 - Slight decrease in staffing
 - ERs are overwhelmed
- Community clinics:
 - Increase in call volume and walk-ins
- Most patients:
 - No contact with initial cases
 - Some present with ILI symptoms



Message 2

- Hospitals and clinics have limited supply of antivirals
 - Prioritized for treatment
- Some staff demand antivirals for prophylaxis
- Unions are supporting their demands



Message 3:

- Your hospital/clinic only has just-in-time supplies
- Rumor that distributors are experiencing distribution problems





Pandemic Influenza Exercise

Situation Update 2

Exercise Simulated Date:

November 24, 2006

Situation Update #2

November 24, 2006

012058 MINNESOTA DEPARTMENT OF HEALTH
Section of Vital Statistics
CERTIFICATE OF DEATH

1. PLACE OF DEATH: STATE OF MINNESOTA
2. COUNTY: CARVER
3. DATE OF DEATH: 3 weeks
4. CAUSE OF DEATH: Lekstera
5. MEDICAL EXAMINER: John Langford
6. FUNERAL HOME: Gloria Wapp
7. DATE OF BURIAL: December 6, 1988
8. AGE: 1000
9. SEX: Female
10. RACE: White
11. MARITAL STATUS: Married
12. PLACE OF BIRTH: Minnesota
13. U.S.A. YES
14. SIGNATURE OF MEDICAL EXAMINER: Andrew Bogelina 153X
15. SIGNATURE OF FUNERAL HOME: Barbara Bogelina
16. SIGNATURE OF VITAL STATISTICS: [Signature]



King County

- Six deaths occurred among mostly young adults
- WA State Lab stops testing: pandemic influenza is widespread in the region

Situation Update #2

November 24, 2006

King County

- Public Health Officer has ordered:
 - Closure of schools and day care centers
 - Cancellation of large events



Situation Update #2

November 24, 2006

WHO Alert: Phase 6

U.S. Response: Stage 5

King County:

- 240 cumulative cases
- 221 current cases
- 6 deaths

Day 22 since first US case

PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Pandemic Influenza Exercise

Situation Update 2

Exercise Simulated Date:

December 1, 2006

Situation Update #2

December 1, 2006

United States

- People are leaving urban centers
 - Vacation homes
 - Long term leases



Situation Update #2

December 1, 2006

King County

- 20% of health care workers are absent
- Antiviral meds only going to:
 - Ill patients in hospitals
 - Ill first responders



Situation Update #2

December 1, 2006

King County

- Supplies of antiviral medications are shrinking
- Spot shortages of other goods begins



Situation Update #2

December 1, 2006

WHO Alert: Phase 6
U.S. Response: Stage 5

King County:

- 2,120 cumulative cases
- 1,880 current cases
- 53 deaths

Day 29 since first US case

PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Questions?

[Message 4]

- X, Y, and Z hospitals overwhelmed with ILI patients
- Other hospitals:
 - ERs overcrowded
 - Most do not have H5N1
- Community clinics have long lines



[Message 5]

- Region-wide, supplies are depleted
- Hospitals are reporting problems, particularly X, Y, and Z hospitals
- Community clinics are overwhelmed





Pandemic Influenza Exercise

Situation Update 3

Exercise Simulated Date:

December 8, 2006

Situation Update #3

December 8, 2006



United States

- Hospitals are struggling
 - Staffing shortages
 - Security challenges
 - Cancelled elective surgeries

Situation Update #3

December 8, 2006

King County

- Antiviral medication almost gone
- Ventilator shortage
- Health system:
 - Low incidence among health care workers
 - Opening alternate care sites



Situation Update #3

December 8, 2006

King County

- Most supplies OK
- Produce shortages
- Security increases:
 - Grocery stores
 - Pharmacies
 - Hospitals



Situation Update #3

December 8, 2006

WHO Alert: Phase 6

U.S. Response: Stage 5

King County:

- 9,600 cumulative cases
- 7,480 current cases
- 240 deaths

Day 43 since first U.S. case

PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Pandemic Influenza Exercise

Situation Update 3

Exercise Simulated Date:

December 15, 2006

Situation Update #3

December 15, 2006

United States

- People continue to leave urban centers
- Transit districts have scaled back routes – limited riders
- People are wearing masks and gloves in public places



Situation Update #3

December 15, 2006



King County

- Increasing number of sick and dead
- Alternate care facilities filling up

Situation Update #3

December 15, 2006

King County

- Perishable food items are unavailable
- Governor has issued anti-price gouging order



Situation Update #3

December 15, 2006

WHO Alert: Phase 6

U.S. Response: Stage 5

King County:

- 40,000 cumulative cases
- 30,400 current cases
- 1,000 deaths

Day 43 since first US case

PANDEMIC INFLUENZA			
WHO Global Pandemic Phases and the Stages for Federal Government Response			
WHO Phases		Federal Government Response Stages	
INTER-PANDEMIC PERIOD			
1	No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human disease is considered to be low.	0	New domestic animal outbreak in at-risk country
2	No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.		
PANDEMIC ALERT PERIOD			
3	Human infection(s) with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	0	New domestic animal outbreak in at-risk country
		1	Suspected human outbreak overseas
4	Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.	2	Confirmed human outbreak overseas
5	Larger cluster(s) but human-to-human spread still localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).		
PANDEMIC PERIOD			
6	Pandemic phase: increased and sustained transmission in general population.	3	Widespread human outbreaks in multiple locations overseas
		4	First human case in North America
		5	Spread throughout United States
		6	Recovery and preparation for subsequent waves



Questions?

[Message 6]

- King County hospitals are full.



[Message 7]

- Hospitals and clinics:
30 – 40% absenteeism
- Metro cancels routes to
many clinics and
hospitals
- Some staff cannot get
to work





BREAK



DEBRIEF



NEXT STEPS



Thank you!